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Honeywell Process Solutions

Experion PKS
IEC 60870 Parameter Reference Guide

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Notices and Trademarks

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About This Document

This document describes the parameters of IEC-870. The parameters can be accessed from the Channel, Controller, Point, or Statistics Parameter tables or from the alphabetical listing.

Intended Audience

The intended audience for this guide includes:

- Operators
- Supervisors
- Engineers
- Managers

Prerequisite Skills

- Familiarity with Experion Process Knowledge System
- Familiarity with IEC 60870-5-101 and 60870-5-104 protocols

REFERENCE - EXTERNAL

For more details on the compatible version of Experion system for the IEC-870 interface, refer to **Experion Software Change Notice.**

How to use this guide

To see parameters pertinent to each function block, see the corresponding page number:

Release Information

Document Name	Document ID	Release Number	Publication Date
IEC 60870 Parameter Reference Guide	EPDOC-X376-en-431A	431	February 2015

References

The following list identifies references for material discussed in this publication.

- Experion documentation
- International Electrotechnical Commission (IEC) website URL: http://www.iec.ch/

The following documents can be referenced for understanding the IEC 60870-5 101 and IEC-60870-5-104 protocols.

Document Name	Edition	Publication Date	Published By
Telecontrol equipment and systems - Part 5-101: Transmission protocols - Companion standard for basic telecontrol tasks	2.0	2003-02-07	IEC
Telecontrol equipment and systems - Part 5-104: Transmission protocols - Network access for IEC 60870-5-101 using standard transport profiles	EPDOC-X376-en-431A	2000-12-21	IEC

Symbol Definitions

The following table lists those symbols used in this document to denote certain conditions.

Symbol	Definition
	**ATTENTION:** Identifies information that requires special consideration.
	**TIP:** Identifies advice or hints for the user, often in terms of performing a task.
	**REFERENCE -EXTERNAL:** Identifies an additional source of information outside of the bookset.
	**REFERENCE - INTERNAL:** Identifies an additional source of information within the bookset.
CAUTION	Indicates a situation which, if not avoided, may result in equipment or work (data) on the system being damaged or lost, or may result in the inability to properly operate the process.
	**CAUTION**: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. **CAUTION** symbol on the equipment refers the user to the product manual for additional information. The symbol appears next to required information in the manual.
	**WARNING**: Indicates a potentially hazardous situation which, if not avoided, could result in serious injury or death. **WARNING** symbol on the equipment refers the user to the product manual for additional information. The symbol appears next to required information in the manual.
	**WARNING, Risk of electrical shock:** Potential shock hazard where HAZARDOUS LIVE voltages greater than 30 Vrms, 42.4 Vpeak, or 60 VDC may be accessible.

Symbol	Definition
	**ESD HAZARD:** Danger of an electro-static discharge to which equipment may be sensitive. Observe precautions for handling electrostatic sensitive devices.
	**Protective Earth (PE) terminal:** Provided for connection of the protective earth (green or green/yellow) supply system conductor.
	**Functional earth terminal:** Used for non-safety purposes such as noise immunity improvement. NOTE: This connection shall be bonded to Protective Earth at the source of supply in accordance with national local electrical code requirements.
	**Earth Ground. Functional earth connection.** NOTE: This connection shall be bonded to Protective Earth at the source of supply in accordance with national and local electrical code requirements.
	**Chassis Ground:** Identifies a connection to the chassis or frame of the equipment shall be bonded to Protective Earth at the source of supply in accordance with national and local electrical code requirements.

Contents

1. IEC-870 Parameter Reference

1.1 Using the parameter reference table

The following table describes the fields in the parameter reference table:

Field	Description
Specific to	Describes whether the parameter is pertinent to the IEC-870 RTU Channel, IEC-870 RTU Controller, or IEC-870 Point. In some cases, a single parameter may be applicable to the channel, controller and point.
Type	Describes the data type of the parameter – whether it is an Integer, Enumeration, Long Integer or a Character (text) parameter.
Range	Range specifies the minimum and maximum values that a parameter can accept, if it is an integer or a long integer data type. If it is Enumeration, Range specifies all the specific values that the parameter can accept. Example: Port Type can either be: 0 – Serial 1 – Terminal Server If the data type is Character, Range and Default value fields are generally not applicable.
Residence	Displays where the parameter is stored. There are two possibilities in the case of **IEC-870**. It could be either Experion or the Point Server. For some parameters, the values are stored in both the Experion and Point Server databases.
Default Value	Indicates the default value that the parameter is assigned, either forcibly by user interface design (iQuick Builder enforced), or by user intervention.
Access Lock	Describes whether a parameter is a View Only parameter or whether it can be modified. There are only two possible values for this field: View Only or Modifiable.
Description	Describes the parameters function and its availability or location, either in Quick Builder, or the Experion Station displays for the channel, controller and point.

1.2 IEC-870 RTU Channel Parameters

The following table lists all the IEC-870 RTU Channel Parameters:

Area	RedundantEnableRTSCTSFlowControl
BackupIPAddress	RedundantEnableStallionRS485HalfDuplex
BaudRate	RedundantIdleTimeout
ConfirmedDataFramesSent	RedundantNumberofdatabits
ConfirmedDataFramesSentOverFlow	RedundantParity
ConfirmTimeOuts	RedundantPortType
ConfirmTimeOutsOverFlow	RedundantSerialPortName
ChannelMode	RedundantStopbits
Checksum	RedundantTerminalChecksum
CommandExecution	RedundantTerminalServerTCPHostName
ConfirmedDataFramesReceived	RedundantTerminalServerTCPPortNo
ConfirmedDataFramesReceivedOverFlow	RedundantXONXOFF
CreateTime	ResetChannelStatistics101
ConfirmACKFramesReceived	ResetChannelStatistics104
ConfirmACKFramesReceivedOverFlow	ResetProcessFramesReceived
ConfirmACKFramesSent	ResetProcessFramesReceivedOverFlow
ConfirmACKFramesSentOverFlow	ResetLinkFramesReceived
ConfirmNACKFramesReceived	ResetLinkFramesReceivedOverFlow
ConfirmNACKFramesReceivedOverFlow	ResetLinkFramesReceivedOverFlow
ConfirmNACKFramesSent	ResetLinkFramesSent
ConfirmNACKFramesSentOverFlow	ResetLinkFramesSentOverFlow
Description	RespondStatusOfLinkFramesSent
DetectDCD	RespondStatusOfLinkFramesSentOverFlow
DetectDSR	RequestStatusOfLinkFramesReceived
DeviceCommands101	RequestStatusOfLinkFramesReceivedOverFlow

Echo	RequestStatusOfLinkFramesSent
Edition	RequestStatusOfLinkFramesSentOverFlow
EnableChannel	RTUsconnected
EnableRTSCTSFlowControl	RTUsconnectedOverFlow
EnableStallionRS485HalfDuplex	StructuredUnstructured
FailAlarmLimit	Stopbits
FramesSent	SerialPortName
FramesSentOverFlow	SerialIOErrors
FramesSentFailed	SerialIOEerrorsOverFlow
FramesSentFailedOverFlow	SingleCharacterACKsSent
FramesReceived	SingleCharacterACKsSentOverFlow
FramesReceivedOverFlow	SingleCharacterAcksReceived
FrameTimeOuts	SingleCharacterAcksReceivedOverFlow
FrameTimeOutsOverFlow	SingleCharacterNacksReceived
FramesRejectedNoBuffersWereAvailable	SingleCharacterNacksReceivedOverFlow
FramesRejectedNoBuffersWereAvailable OverFlow	SFramesSent
GuaranteedTimeRequestExpirations	SFramesSentOverFlow
GuaranteedTimeRequestExpirationsOver Flow	SFramesWasReceived
IdleTimeout	SFramesWasReceivedOverFlow
IFramesSent	TotalBytesSent
IFramesSentOverFlow	TotalBytesSentOverFlow
IFramesWasReceived	TestFunctionOfLinkFramesReceived
IFramesWasReceivedOverFlow	TestFunctionOfLinkFramesReceivedOverFlow
InvalidFunctionCodeErrors	TerminalChecksum
InvalidFunctionCodeErrorsOverFlow	TerminalServerTCPHostName
Invalidframesdroppedoflinklayerproblems	TerminalServerTCPPortNo

InvalidFramesDroppedOfApplicationLayer Problems	TransmitRetriesSent
InvalidFramesDroppedOfApplicationLayer ProblemsOverFlow	TransmitRetriesSentOverFlow
InvalidStartCharacters	TimesDFCBitWasSetintxsec
InvalidStartCharactersOverFlow	TimesDFCBitWasSetintxsecOverFlow
InvalidLengthErrors	TimesT1Expired
InvalidLengthErrorsOverFlow	TimesT1ExpiredOverFlow
InvalidAddressesDetected	TimesT2Expired
InvalidAddressesDetectedOverFlow	TimesT2ExpiredOverFlow
InvalidFramesDroppedOfLinkLayerProble msOverFlow	TimesT3Expired
InvalidChecksumErrors	TimesT3ExpiredOverFlow
InvalidChecksumErrorsOverFlow	TimesTestMessageWasSent
InvalidEndCharacters	TimesTestMessageWasSentOverFlow
InvalidEndCharactersOverFlow	TimesStartDTWasSent
InvalidFCBBitInTheControlOctet	TimesStartDTWasSentOverFlow
InvalidFCBBitInTheControlOctetOverFlow	TimesStopDTWasReceived
InvalidFCVBitInTheControlOctet	TimesStopDTWasReceivedOverFlow
InvalidFCVBitInTheControlOctetOverFlow	TimesDFCBitWasSetInrxsecFrame
LengthofLinkAddress	TimesDFCBitWasSetInrxsecFrameOverFlow
MarginalAlarmLimit	TimesTestMessageWasReceived
MasterAddress	TimesTestMessageWasReceivedOverFlow
Name	TXExpirations
Numberofdatabits	TXExpirationsOverFlow
Parity	TotalBytesReceivedIncludingOverhead
PointDetailDisplay	TotalBytesReceivedIncludingOverheadOverFlow
PortType	TXIOErrors

ProtocolType	TXIOErrorsOverFlow
ReadChannelStatistics101	UFramesSent
ReadChannelStatistics104	UFramesSentOverFlow
RespondStatusOfLinkFramesReceived	UFramesWasReceived
RespondStatusOfLinkFramesReceivedOverFlow	UFramesWasReceivedOverFlow
ReconnectRetries	UnconfirmedDataFramesReceived
ReconnectRetriesOverFlow	UnconfirmedDataFramesReceivedOverFlow
RedundantBaudRate	UnconfirmedDataFramesSent
RedundantDetectDCD	UnconfirmedDataFramesSentOverFlow
RedundantDetectDSR	UnsupportedSingleCharAcksReceived
	UnsupportedSingleCharAcksReceivedOverFlow

1.3 IEC-870 RTU Controller Parameters

The following table lists all the IEC-870 RTU Controller parameters:

AcknowledgeTimeoutT2	ReadControllerStatistics104
ACTCONExpected	RequestStatusOfLinkFramesReceived
ACTCONTimeout	RespondStatusOfLinkFramesReceivedOverFlow
ACTTERMExpected	ReconnectRetries
ACTTERMTimeout	ReconnectRetriesOverFlow
Area	RedundantChecksum
ASDUAddress	RedundantTerminalChecksum
CommandText1	RedundantEcho
CommandText2	ResetControllerStatistics101
ConfirmedDataFramesSent	ResetControllerStatistics104
ConfirmedDataFramesSentOverFlow	ResetProcessFramesReceived
ConfirmTimeOuts	ResetProcessFramesReceivedOverFlow
ConfirmTimeOutsOverFlow	ResetLinkFramesReceived
CauseofTransmissionAddress	ResetLinkFramesReceivedOverFlow
CommandExecution	ResetLinkFramesSent
CommonAddressOfASDU	ResetLinkFramesSentOverFlow
ConfirmedDataFramesReceived	Retries
ConfirmedDataFramesReceivedOverFlow	RespondStatusOfLinkFramesSent
ConnectionEstablishmentTimeoutT0	RespondStatusOfLinkFramesSentOverFlow
ControllerChannelName	RequestStatusOfLinkFramesSentOverFlow
CounterInterrogationGeneralRequest	RequestStatusOfLinkFramesReceived
CounterinterrogationGroup1	RequestStatusOfLinkFramesReceivedOverFlow
CounterinterrogationGroup2	RequestStatusOfLinkFramesSent
CounterinterrogationGroup3	RespondStatusOfLinkFramesSentOverFlow
CounterinterrogationGroup4	RTUsconnected

CounterQualifierGeneralRequest	RTUsconnectedOverFlow
CounterQualifierGroup1	ScanFrequencyForClass2
CounterQualifierGroup2	SendAPDUTImeoutT1
CounterQualifierGroup3	SerialIOErrors
CounterQualifierGroup4	SerialIOErrorsOverFlow
CreateTime	SingleCharacterACKsSent
ConfirmACKFramesReceived	SingleCharacterACKsSentOverFlow
ConfirmACKFramesReceivedOverFlow	SingleCharacterAcksReceived
ConfirmACKFramesSent	SingleCharacterAcksReceivedOverFlow
ConfirmACKFramesSentOverFlow	SingleCharacterNacksReceived
ConfirmNACKFramesReceived	SingleCharacterNacksReceivedOverFlow
ConfirmNACKFramesReceivedOverFlow	SFramesSent
ConfirmNACKFramesSent	SFramesSentOverFlow
ConfirmNACKFramesSentOverFlow	SFramesWasReceived
DATimeOut	SFramesWasReceivedOverFlow
DefaultOverride	StationInterrogationGlobal
Description	StationInterrogationGroup1
DeviceCommands104	StationInterrogationGroup2
DownloadFilePath	
Edition	StationInterrogationGroup3
EnableClockSyncEvent	StationInterrogationGroup4
EnableClockSyncProcedure	StationInterrogationGroup5
EnableController	StationInterrogationGroup6
EnableTxDelayAcquisitionProcedure	StationInterrogationGroup7
FixedTxDelay	StationInterrogationGroup8
FramesSent	StationInterrogationGroup9
FramesSentOverFlow	StationInterrogationGroup10

FramesSentFailed	StationInterrogationGroup11
FramesSentFailedOverFlow	StationInterrogationGroup12
FramesReceived	StationInterrogationGroup13
FramesReceivedOverFlow	StationInterrogationGroup14
FrameTimeOuts	StationInterrogationGroup15
FrameTimeOutsOverFlow	StationInterrogationGroup16
FramesRejectedNoBuffersWereAvailable	TestFunctionOfLinkFramesReceived
FramesRejectedNoBuffersWereAvailableOverFlow	TestFunctionOfLinkFramesReceivedOverFlow
GuaranteedTimeRequestExpirations	TimesDFCBitWasSetintxsec
GuaranteedTimeRequestExpirationsOverFlow	TimesDFCBitWasSetintxsecOverFlow
IdleTestTimeoutT3	TimesDFCBitWasSetInrxsecFrame
IPAddressforRTU	TimesDFCBitWasSetInrxsecFrameOverFlow
IFramesSent	TimesT1Expired
IFramesSentOverFlow	TimesT1ExpiredOverFlow
IFramesWasReceived	TimesT2Expired
IFramesWasReceivedOverFlow	TimesT2ExpiredOverFlow
InvalidFunctionCodeErrors	TimesT3Expired
InvalidFunctionCodeErrorsOverFlow	TimesT3ExpiredOverFlow
Invalidframesdroppedoflinklayerproblems	TimesTestMessageWasSent
InvalidFramesDroppedOfApplicationLayerProblems	TimesTestMessageWasSentOverFlow
InvalidFramesDroppedOfApplicationLayerProblemsOverFlow	TimesStartDTWasSent
InvalidStartCharacters	TimesStartDTWasSentOverFlow
InvalidStartCharactersOverFlow	TimesStopDTWasReceived
InvalidLengthErrors	TimesStopDTWasReceivedOverFlow
InvalidLengthErrorsOverFlow	TimesTestMessageWasReceived

InvalidAddressesDetected	TimesTestMessageWasReceivedOverFlow
InvalidAddressesDetectedOverFlow	TotalBytesSent
InvalidFramesDroppedOfApplicationLayerProblemsOverFlow	TotalBytesSentOverFlow
InvalidChecksumErrors	TxDelayProcedureTimer
InvalidChecksumErrorsOverFlow	TransmitRetriesSent
InvalidEndCharacters	TransmitRetriesSentOverFlow
InvalidEndCharactersOverFlow	TXExpirations
InvalidFCBBitInTheControlOctet	TXExpirationsOverFlow
InvalidFCBBitInTheControlOctetOverFlow	TotalBytesReceivedIncludingOverhead
InvalidFCVBitInTheControlOctet	TotalBytesReceivedIncludingOverheadOverFlow
InvalidFCVBitInTheControlOctetOverFlow	TXIOErrors
LengthofCauseofTransmissionFieldParameter	TXIOErrorsOverFlow
LengthOfCommonAddressOfASDUParameter	UFramesSent
LengthOfInformationObjectAddressParameter	UFramesSentOverFlow
LinkAddress	UFramesWasReceived
MaxRcvw	UFramesWasReceivedOverFlow
MaxXMTk	UnconfirmedDataFramesReceived
Name	UnconfirmedDataFramesReceivedOverFlow
ObjectAddress	UnconfirmedDataFramesSent
Period	UnconfirmedDataFramesSentOverFlow
ProtocolType	UnsupportedSingleCharAcksReceived
ReadControllerStatistics101	UnsupportedSingleCharAcksReceivedOverFlow

1.4 IEC-870 Point Parameters

The following table lists all the IEC-870 RTU point parameters:

AccumulatorAlarmLimit1	ControlInhibit
AccumulatorAlarmLimit2	ControlTimeout
AccumulatorAlarmLimit3	CreateTime
AccumulatorAlarmLimit4	ControlLevel
AccumulatorAlarmPriority1	DefaultOverride
AccumulatorAlarmPriority2	Description
AccumulatorAlarmPriority3	DisableModeCheckingOnOutput
AccumulatorAlarmPriority4	EULO
AccumulatorAlarmSubPriority1	EUHI
AccumulatorAlarmSubPriority2	GroupNumber
AccumulatorAlarmSubPriority3	GroupFaceplateTemplateDisplay
AccumulatorAlarmSubPriority4	InterrogationGroup
AccumulatorAlarmType1	Invalid
AccumulatorAlarmType2	ModeState
AccumulatorAlarmType3	ManualOverwrite
	ManualUpdate
AccumulatorAlarmType4	Name
AccumulatorCommands	NormalMode
AccumulatorControlFailPriority	NonTopical
AccumulatorControlFailSubPriority	OnScan
AccumulatorEnableControlFailAlarm	OPObjectType

AccumulatorMeterFactor	OPObjectAddress
AccumulatorRollOverValue	OutputState
AccumulatorScaleFactor	OutputValue
Alarm	Overflow
AlarmDisabled	ParameterLoadingValue
AnalogAlarmLimit1	PointControllerName
AnalogAlarmLimit2	PointTypes
AnalogAlarmLimit3	PositionInGroup
AnalogAlarmLimit4	PositionInTrendSet
AnalogAlarmPriority1	PointState
AnalogAlarmPriority2	PointValue
AnalogAlarmPriority3	PVLastProcessedTime
AnalogAlarmPriority4	PVObjectType
AnalogAlarmSubPriority1	Qualifier
AnalogAlarmSubPriority2	SelectBeforeExecute
AnalogAlarmSubPriority3	ScaleFactor
AnalogAlarmSubPriority4	ScanningInhibit
AnalogAlarmType1	StateDescriptor0
AnalogAlarmType2	StateDescriptor1
AnalogAlarmType3	StateDescriptor2
AnalogAlarmType4	StateDescriptor3
AnalogClampPV	StatusCommands
AnalogCommands	StatusControlFailPriority
AnalogControlFailAlarmEnable	StatusEnableControlFailAlarm
AnalogControlFailAlarmPriority	StatusEnableModeChangeAlarm
AnalogControlFailAlarmSubPriority	StatusEnableState0Alarm
AnalogDeadband	StatusEnableState1Alarm

AnalogDriftDeadband	StatusEnableState2Alarm
EngineeringUnit	StatusEnableState3Alarm
AnalogHighControlLimit	StatusModeChangePriority
AnalogLowControlLimit	StatusState0Priority
AnalogModeAlarmEnable	StatusState1Priority
AnalogModeChangeAlarmPriority	StatusState2Priority
AnalogModeChangeAlarmSubPriority	StatusState3Priority
AnalogUnreasonableValueAlarmPriority	StatusState0SubPriority
AnalogUnreasonableValueSubPriority	StatusState1SubPriority
AnalogUnreasonableValueAlarmEnable	StatusState2SubPriority
Area	StatusState3SubPriority
AssociatedDisplay	StatusControlFailSubPriority
Blocked	StatusEnableSOE
Carry	StatusModeChangeSubPriority
CarryAdjust	StatusRealarmOnStateTransition
Clamp	StatusState1SubPriority
Class1Class2	StatusState2SubPriority
CommandExecution	StatusState3SubPriority
CommandText1	TimeTag
CommandText2	TrendNumber
Coefficient	TrendParameter
Constant	XONXOFF
Control	
ControlConfirmation	

1.5 Statistics Parameters

The following table lists the Statistics parameters.

ConfirmACKFramesSent	ResetLinkFramesSent
FramesSentFailed	ResetProcessFramesReceived
FramesReceived	RespondStatusOfLinkFramesReceived
FrameTimeOuts	RequestStatusOfLinkFramesReceived
IFramesSent	SerialIOErrors
InvalidFunctionCodeErrors	TimesDFCBitWasSetintxsec
Invalidframesdroppedoflinklayerproblems	TimesTestMessageWasSent
InvalidFramesDroppedOfApplicationLayerProblems	TimesStartDTWasSent
InvalidStartCharacters	TimesStopDTWasReceived
InvalidChecksumErrors	TimesDFCBitWasSetInrxsecFrame
InvalidFCBBitInTheControlOctet	TimesTestMessageWasReceived
InvalidFCVBitInTheControlOctet	TotalBytesReceivedIncludingOverhead
ReadControllerStatistics101	TXIOErrors
ReadChannelStatistics101	UFramesWasReceived
ReconnectRetries	UnconfirmedDataFramesSent
ResetLinkFramesReceived	UnsupportedSingleCharAcksReceived

1.6 IEC-870 Protocol-related Parameters

The following table lists the protocol related parameters.

LogLevels	SequenceNumber

2. Alphabetical Listing of Parameters

2.1 A

AccumulatorAlarmLimit1

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+14 to 3.4E+14
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Accumulator Alarm Limit 1 Indicates the alarm limit for an accumulator point's alarm number 1. Alarm Limit is the PV value, in engineering units, at which an alarm is generated. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is applicable for an accumulator point. It is also available in the Station in the point detail display.

AccumulatorAlarmLimit2

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+38 to 3.4E+38
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Accumulator Alarm Limit 2 Indicates the alarm limit for an accumulator point's alarm number 2. Alarm Limit is the PV value, in engineering units, at which an alarm is generated. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is applicable for an accumulator point. It is also available in the Station in the point detail display.

AccumulatorAlarmLimit3

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+38 to 3.4E+38
Residence	Experion
Default Value	0
Access Lock	Modifiable
Description	Indicates the alarm limit for an accumulator point's alarm number 3. Alarm Limit is the PV value, in engineering units, at which an alarm is generated. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is applicable for an accumulator point. It is also available in the Station in the point detail display.

AccumulatorAlarmLimit4

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+38 to 3.4E+38
Residence	Experion
Default Value	0
Access Lock	Modifiable
Description	Indicates the alarm limit for an accumulator point's alarm number 3. Alarm Limit is the PV value, in engineering units, at which an alarm is generated. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is applicable for an accumulator point. It is also available in the Station in the point detail display.

AccumulatorAlarmPriority1

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable
Description	Describes the priority for an accumulator point's alarm 1. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AccumulatorAlarmPriority2

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable
Description	Describes the priority for an accumulator point's alarm 2. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AccumulatorAlarmPriority3

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Experion, Point Server
Default Value	0 – Journal
Access Lock	Modifiable

Description	Describes the priority for an accumulator point's alarm 3. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AccumulatorAlarmPriority4

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable
Description	Describes the priority for an accumulator point's alarm 4. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AccumulatorAlarmSubPriority1

Specific to	IEC-870 Point
Type	Integer
Range	0 to 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Describes the subpriority for an accumulator point's alarm 1. For an analog point, this specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AccumulatorAlarmSubPriority2

Specific to	IEC-870 Point
Type	Integer
Range	0 to 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Describes the subpriority for an accumulator point's alarm 1. For an analog point, this specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AccumulatorAlarmSubPriority3

Specific to	IEC-870 Point
Type	Integer
Range	0 to 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Describes the subpriority for an accumulator point's alarm 1. For an analog point, this specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AccumulatorAlarmSubPriority4

Specific to	IEC-870 Point
Type	Integer
Range	0 to 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Describes the subpriority for an accumulator point's alarm 1. For an analog point, this specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AccumulatorAlarmType1

Specific to	IEC-870 Point
Type	Enumeration
Range	0 - None 1 - PVHigh 2 - PVHIghHigh
Residence	Point Server
Default Value	0 - None
Access Lock	Modifiable
Description	Accumulator Alarm Type 1 specifies the type of alarm for alarm number 1. For an accumulator point, it can be None, PVHigh or PVHighHigh. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AccumulatorAlarmType2

Specific to	IEC-870 Point
Type	Enumeration
Range	0 - None 1- PVHigh 2- PVHIghHigh
Residence	Point Server
Default Value	0 -None
Access Lock	Modifiable

Description	Accumulator Alarm Type 2 specifies the type of alarm for alarm number 2. For an accumulator point, it can be None, PVHigh or PVHighHigh. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AccumulatorAlarmType3

Specific to	IEC-870 Point
Type	Enumeration
Range	0 - None 1- PVHigh 2- PVHIghHigh
Residence	Point Server
Default Value	0 -None
Access Lock	Modifiable
Description	Specifies the type of alarm for alarm number 3. For an accumulator point, it can be None, PVHigh or PVHighHigh. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AccumulatorAlarmType4

Specific to	IEC-870 Point
Type	Enumeration
Range	0 - None 1 - PVHigh 2 - PVHIghHigh
Residence	Point Server
Default Value	0 – None

Access Lock	Modifiable
Description	Specifies the type of alarm for alarm number 3. For an accumulator point, it can be None, PVHigh or PVHighHigh. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AccumulatorCommands

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Read
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Used to execute the Accumulator Point's Read command from the Station. This parameter is available in the Command tab of the point's display.

AccumulatorControlFailPriority

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable

Description	Indicates the priority for an Accumulator Control Fail Alarm. A control fail alarm raises an alarm if the value of a control parameter, such as OutputValue is not correct. (After issuing a new control value, the server scans the point to check the point's control value is correct.) Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is applicable only if the Control Type is Only Control or Control and Input. It is also available in the Station in the point detail display.

AccumulatorControlFailSubPriority

Specific to	IEC-870 Point
Type	Integer
Range	0 to 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Describes the subpriority for an accumulator point's control fail alarm. This specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is applicable only if the Control Type is Only Control or Control and Input. It is also available in the Station in the point detail display.

AlarmDisabled

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not selected 1 – Enabled or Selected
Residence	Experion, Point Server
Default Value	0 – Disabled or Not selected
Access Lock	Modifiable
Description	For an accumulator point, this parameter determines if alarms on this point should be generated. If this parameter is zero, alarms should be generated as normal. If this parameter is non-zero, alarms from this point should be disabled. The Experion Server writes to this parameter if to change alarm generation state of a point. If alarming changes state from disabled to enabled, Point Server shall send any active alarms on this point to the Experion Server. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AccumulatorEnableControlFailAlarm

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable

Description	This parameter is used to enable the Control Fail Alarm for an accumulator point. It is available in the Alarms tab of the point's configuration form in Quick Builder, only when the control type is Control and Input or Only Control. It is also available in the Alarms tab of the point detail display, when the control type is Control and Input or Only Control.

AccumulatorMeterFactor

Specific to	IEC-870 Point
Type	Long
Range	0 - 2147483647
Residence	Point Server
Default Value	1
Access Lock	Modifiable
Description	Applicable to an Accumulator point. The meter factor is a multiplier used for calibration of the PV value, using the following formula: PV(new) = PV(old) + (scale factor x meter factor x raw counts). The default value is 1. This parameter is available in the Detail tab of the point's configuration form in Quick Builder. It is applicable for an Accumulator point. It is also available in the Station in the point detail display.

AccumulatorRollOverValue

Specific to	IEC-870 Point
Type	Long
Range	-2147483648 to + 2147483647
Residence	Point Server
Default Value	4095

Access Lock	Modifiable
Description	Rollover Value, for an accumulator point, must be set to the maximum value attained by the "physical" counting or totalizing mechanism. This parameter is available in the Detail tab of the point's configuration form in Quick Builder. It is applicable for an Accumulator point. It is also available in the Station in the point detail display.

AccumulatorScaleFactor

Specific to	IEC-870 Point
Type	Long
Range	0 - 2147483647
Residence	Point Server
Default Value	1
Access Lock	Modifiable
Description	Scale Factor, for an accumulator point, represents the value used to convert the counts to engineering units. The default, 1, means that a one-to-one ratio exists between the counts and the engineering units. A value of 10 would mean that one count equals 10 engineering units. This parameter is available in the Detail tab of the point's configuration form in Quick Builder. It is applicable for an Accumulator point. It is also available in the Station in the point detail display.

AcknowledgeTimeoutT2

Specific to	IEC-870 RTU Controller
Type	Integer
Range	1 - 3600 seconds
Residence	Point Server
Default Value	10 seconds
Access Lock	View Only
Description	Represents the time-out period for acknowledgements in case of no data messages (t2 < t1). The default value for this field is 10. This parameter is available in the Timers tab of the controller's configuration form in Quick Builder, when the protocol type is 60870-5-101. It is also available in the Station in the controller's display.

ACTCONExpected

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – Disabled or Not selected 1 – Enabled or Selected
Residence	Point Server
Default Value	1 – Enabled or Selected
Access Lock	View Only
Description	Indicates whether the ACTCON message is expected or not. This parameter is available in the Timers tab of the controller's configuration form in Quick Builder, when the protocol type is 60870-5-101. It is also available in the Station in the controller's display.

ACTCONTimeout

Specific to	IEC-870 RTU Controller
Type	Integer
Range	1 - 32767
Residence	Point Server
Default Value	4000 milliseconds
Access Lock	View Only
Description	Represents the connection timeout to receive the “ACTCON” message. This parameter is available in the Timers tab of the controller’s configuration form in Quick Builder, when the protocol type is 60870-5-101. It is also available in the Station in the controller’s display.

ACTTERMExpected

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – Disabled or Not selected 1 – Enabled or Selected
Residence	Point Server
Default Value	1 – Enabled or Selected
Access Lock	View Only
Description	Indicates whether the ACTTERM message is expected or not. This parameter is available in the Timers tab of the controller’s configuration form in Quick Builder, when the protocol type is 60870-5-101. It is also available in the Station in the controller’s display.

ACTTERMTimeout

Specific to	IEC-870 RTU Controller
Type	Integer
Range	1 – 32767
Residence	Point Server
Default Value	4000 milliseconds
Access Lock	View Only
Description	Indicates the timeout time to receive the “ACTTERM” message. This parameter is available in the Timers tab of the controller’s configuration form in Quick Builder, when the protocol type is 60870-5-101. It is also available in the Station in the controller’s display.

AlarmStatus

Specific to	IEC-870 Point
Type	Character
Range	0 – 255
Residence	Point Server
Default Value	NULL
Access Lock	Modifiable
Description	Stores the text (PVHigh, PVHiHigh, PVLoLow, etc.) that is displayed along with the Alarm icon in the FacePlate. This parameter is displayed in the Station display for the point. It is also available in the Station in the point detail display.

AnalogAlarmLimit1

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+38 to 3.4E+38
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the alarm limit for an analog point's alarm 1. Alarm Limit is the PointValue, in engineering units, at which an alarm is generated. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmLimit2

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+38 to 3.4E+38
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the alarm limit for an analog point's alarm 2. Alarm Limit is the PointValue, in engineering units, at which an alarm is generated. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmLimit3

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+38 to 3.4E+38
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the alarm limit for an analog point's alarm 3. Alarm Limit is the PointValue, in engineering units, at which an alarm is generated. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmLimit4

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+38 to 3.4E+38
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the alarm limit for an analog point's alarm 4. Alarm Limit is the PointValue, in engineering units, at which an alarm is generated. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmPriority1

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable
Description	Describes the priority for an analog point's alarm 1. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmPriority2

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable

Description	Describes the priority for an analog point's alarm2. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmPriority3

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable
Description	Describes the priority for an analog point's alarm 3. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmPriority4

Specific to	IEC-870 Point
Type	Enumeration

Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable
Description	Describes the priority for an analog point's alarm 4. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmSubPriority1

Specific to	IEC-870 Point
Type	Integer
Range	0 - 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Describes the subpriority for an analog point's alarm 1. For an analog point, this specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmSubPriority2

Specific to	IEC-870 Point
Type	Integer
Range	0 - 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Describes the subpriority for an analog point's alarm 2. For an analog point, this specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmSubPriority3

Specific to	IEC-870 Point
Type	Integer
Range	0 - 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Describes the subpriority for an analog point's alarm 3. For an analog point, this specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmSubPriority4

Specific to	IEC-870 Point
Type	Integer
Range	0 - 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Describes the subpriority for an analog point's alarm 4. For an analog point, this specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmType1

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – None 1 – PVLow 2 – PVLowLow 3 – PVHigh 4 – PVHighHigh
Residence	Point Server
Default Value	0 – None
Access Lock	Modifiable

Description	Specifies the type of alarm for alarm number 1. For an analog point, it can be None, PVLow, PVLowLow, PVHigh and PVHighHigh. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmType2

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – None 1 – PVLow 2 – PVLowLow 3 – PVHigh 4 – PVHighHigh
Residence	Point Server
Default Value	0 – None
Access Lock	Modifiable
Description	Specifies the type of alarm for alarm number 2. For an analog point, it can be None, PVLow, PVLowLow, PVHigh and PVHighHigh. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmType3

Specific to	IEC-870 Point
Type	Enumeration

Range	0 – None 1 – PVLow 2 – PVLowLow 3 – PVHigh 4 – PVHighHigh
Residence	Point Server
Default Value	0 – None
Access Lock	Modifiable
Description	Specifies the type of alarm for alarm number 3. For an analog point, it can be None, PVLow, PVLowLow, PVHigh and PVHighHigh. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Station in the point detail display.

AnalogAlarmType4

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – None 1 – PVLow 2 – PVLowLow 3 – PVHigh 4 – PVHighHigh
Residence	Point Server
Default Value	0 – None
Access Lock	Modifiable
Description	Specifies the type of alarm for alarm number 4. For an analog point, it can be None, PVLow, PVLowLow, PVHigh and PVHighHigh. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Station in the point detail display.

AnalogClampPV

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not selected
Access Lock	Modifiable

Description	If selected, the PV value is clamped to either 0% (low) or 100% (high) if the value exceeds either low or high limits set for the PV clamp. The PV clamp's high and low limits are defined in Station using the Point Processing tab of the Alarm and Point Processing display. This parameter is available in the Detail tab of the point's configuration form in Quick Builder, when the point type is Analog. If the control type is Only Control, this parameter is not applicable and is disabled. It is also available in the Station in the point detail display.
AnalogCommands	
Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Read 1 – Parameter Loading Threshold Value 2 – Parameter Loading Smoothing Factor 3 – Parameter Loading Low Limit for Transmission of measured values 4 – Parameter Loading High Limit for Transmission of measured values 5 – Parameter Activation Act/deact of the previously loaded parameters 6 – Parameter Activation Act/deact of the parameter of the addressed object 7 – Parameter Activation Act/deact of Persistent cyclic or periodic transmission
Residence	Point Server
Default Value	0 – Read
Access Lock	Modifiable

Description Used to execute the Analog Point commands like Read, Parameter Activation and Parameter loading command from the Station.

This parameter is available in the Command tab of the point's display.

AnalogControlFailAlarmEnable

Specific to IEC-870 Point

Type Enumeration

Range 0 – Disabled or Not selected
1 – Enabled or Selected

Residence Point Server

Default Value 0 – Disabled or Not selected

Access Lock Modifiable

Description When this parameter is enabled, an alarm configured to trigger when an OutputValue, ModeState, or a parameter control is issued and a demand scan on the source address, performed by the server, finds their value does not match the controlled value.

This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is applicable only if the Control Type is Only Control or Control and Input.

It is also available in the Station in the point detail display.

AnalogControlFailAlarmPriority

Specific to IEC-870 Point

Type Enumeration

Range 0 – Journal
1 – Low
2 – High
3 – Urgent

Residence Point Server

Default Value	0 – Journal
Access Lock	Modifiable
Description	Indicates the priority for an Analog Control Fail Alarm. A control fail alarm raises an alarm if the value of a control parameter, such as OutputValue not correct. (After issuing a new control value, the server scans the point to check the point's control value is correct.) Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is applicable only if the Control Type is Only Control or Control and Input. It is also available in the Station in the point detail display.

AnalogControlFailAlarmSubPriority

Specific to	IEC-870 Point
Type	Integer
Range	0 to 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Describes the subpriority for an analog point's control fail alarm. This specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is applicable only if the Control Type is Only Control or Control and Input. It is also available in the Station in the point detail display.

AnalogDeadband

Specific to	IEC-870 Point
Type	Enumeration
Range	0 - 0.000 1 - 0.001 2 - 0.002 3 - 0.005 4 - 0.010 5 - 0.020 6 - 0.050 7 - 0.100 8 - 0.200 9 - 0.500 10 - 1.000 11 - 2.000 12 - 5.000 13 - 10.000 14 - 20.000 15 - 50.000 (in %)
Residence	Point Server
Default Value	0 – 0.000%
Access Lock	Modifiable
Description	Specifies the percentage change, for an analog point, in a parameter's value that is significant enough to require processing. Specifying a drift deadband helps reduce system load. The default is 0.500%. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is available only when the point type is Analog. It is also available in the Station in the point detail display.

AnalogDriftDeadband

Specific to	IEC-870 Point
Type	Enumeration
Range	0 - 0.000 1 - 0.001 2 - 0.002 3 - 0.005 4 - 0.010 5 - 0.020 6 - 0.050 7 - 0.100 8 - 0.200 9 - 0.500 10 - 1.000 11 - 2.000 12 - 5.000 13 - 10.000 14 - 20.000 15 - 50.000 (in %)
Residence	Point Server
Default Value	0 – 0.000 %
Access Lock	Modifiable
Description	Specifies the percentage change, for an analog point, in a parameter's value that is significant enough to require processing. Specifying a drift deadband helps reduce system load. The default is 0.000%. This parameter is available in the Detail tab of the point’s configuration form in Quick Builder. It is applicable when the point type is Analog. This parameter is disabled, if the control type is Only Control. It is also available in the Station in the point detail display.

AnalogHighControlLimit

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+38 to 3.4E+38
Residence	Point Server
Default Value	100
Access Lock	Modifiable
Description	Represents the highest register value, for an analog point, for the PointValue, when an alarm is raised. This parameter is available in the Detail tab of the point's configuration form in Quick Builder. It is applicable when the point type is Analog. If the control type is Only Input, then this parameter is disabled. It is also available in the Station in the point detail display.

AnalogLowControlLimit

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+38 to 3.4E+38
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Represents the lowest register value, for an analog point for the PointValue, when an alarm is raised. This parameter is available in the Detail tab of the point's configuration form in Quick Builder. It is applicable when the point type is Analog. If the control type is Only Input, then this parameter is disabled. It is also available in the Station in the point detail display.

AnalogModeAlarmEnable

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected.
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable
Description	Indicates the check box to enable the Mode Change Alarm for an Analog point. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AnalogModeChangeAlarmPriority

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable
Description	Indicates the priority for an Analog Mode Change alarm. A Mode Change Alarm raises an alarm, when the ModeState of the point is changed. The alarm is raised when the ModeState moves to manual and returns to normal or when the mode goes to “auto.” Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point’s configuration form, in Quick Builder. It is applicable only if the Control Type is Only Control or Control and Input. It is also available in the Station in the point detail display.

AnalogModeChangeAlarmSubPriority

Specific to	IEC-870 Point
Type	Integer
Range	0 to 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable

Description	Describes the subpriority for an analog point's mode change alarm. This specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarm's tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AnalogUnreasonableValueAlarmPriority

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable
Description	Indicates the priority for an Analog Unreasonable Value alarm. Unreasonable Value Alarm raises an alarm if the PointValue goes outside the reasonable value range. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Station in the point detail display.

AnalogUnreasonableValueSubPriority

Specific to	IEC-870 Point
Type	Integer
Range	0 to 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Describes the subpriority for an analog point's Unreasonable Value alarm 1. For an analog point, this specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarm's tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

AnalogUnreasonableValueAlarmEnable

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected.
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable
Description	Indicates the check box for selecting the Unreasonable Value Alarm for an Analog point. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Station in the point detail display.

Area

Specific to	IEC-870 RTU Channel, Controller and Point
Type	Character
Range	0 to 40 characters. Null or two character code. Alphanumeric character (A-Z, 0-9)
Residence	Experion
Default Value	Null
Access Lock	View Only
Description	Area Code is a two letter code for the area that the point belongs to. This should be same as the asset associated with the point server. Value must be between 1 and 30 characters, illegal characters include tab, dot(.), comma(,), /, \\, <, >, ', double quote, *, ?, |,%, semicolon(;) and colon(:) This parameter is available for in the Main tab of the channel, controller and point's configuration forms in Quick Builder.

ASDUAddress

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – Structured 1 – Unstructured
Residence	Point Server
Default Value	1 – Unstructured
Access Lock	View Only
Description	ASDU Address can be Unstructured or Structured. ** The current release supports Unstructured only. This parameter is available in the Protocol tab in the controller's configuration form, in Quick Builder. It is also available in the Controller's display in the Station.

AssociatedDisplay

Specific to	IEC-870 Point
Type	Character
Range	0 – 255
Residence	Experion, Point Server
Default Value	Default
Access Lock	Modifiable
Description	The display that is called up when an operator selects the point (or its alarm in the Alarm Summary) and then clicks the Associated Display button on the toolbar. This parameter is available in the Display tab in the point's configuration form, in Quick Builder.

2.2 B

BackupIPAddress

Specific to	IEC-870 RTU Channel
Type	Character
Range	1-16 (0.0.0.0 to 255.255.255.255)
Residence	Point Server
Default Value	0.0.0.0
Access Lock	View Only
Description	Indicates the backup IP Address of the RTU entered in the Redundant Port tab, while configuring the channel, in case of a redundant configuration. This parameter is available in the Redundant Port tab of the channel's configuration form in Quick Builder, when the selected port type is Ethernet. It is also available in the Channel display in the Station.

BaudRate

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 - 300 1 - 600 2 - 1200 3 - 1800 4 - 2400 5 - 4800 6 - 9600 7 - 19200 8 - 38400.
Residence	Experion, Point Server

Default Value	6 - 9600
Access Lock	View Only
Description	Baud Rate indicates the data transmission rate (bits/second). This parameter is available in the Port tab of the channel's configuration form in Quick Builder.
Blocked	
Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	View Only
Description	If the monitored status of a circuit-breaker is blocked because the field interface is in test mode, the quality descriptor (BL = 1 "blocked") is transferred unchanged through all system levels from the field interface to the controlling station.

2.3 C

Carry

Specific to	Single Point Information without Time Tag
Type	Enumeration
Range	0 – Disabled 1 – Selected
Residence	Point Server
Default Value	0 – Disabled
Access Lock	Modifiable
Description	0 (No-carry) indicates that counter overflow occurred in the corresponding integration period. Counter overflow occurs when the value increments from 231 -1 to zero or from -231 to zero.

CarryAdjust

Specific to	Single Point Information without Time Tag
Type	Enumeration
Range	0 – Disabled 1 – Selected
Residence	Point Server
Default Value	0 – Disabled
Access Lock	Modifiable
Description	Single Point Information without Time Tag

CommandText1

Specific to	IEC-870 Point
Type	Character
Range	0 – 8
Residence	Point Server
Default Value	Null
Access Lock	Modifiable
Description	Command text is used to enter Status Point commands. This parameter is available in the Details tab of the point's configuration form in Quick Builder.

CommandText2

Specific to	IEC-870 Point
Type	Character
Range	0 – 8
Residence	Point Server
Default Value	Null
Access Lock	Modifiable
Description	Command text is used to enter Status Point commands. This parameter is available in the Details tab of the point's configuration form in Quick Builder.

ConfirmedDataFramesSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of confirmed data frames sent. This parameter is displayed in the channel and controller displays in the Station.

ConfirmedDataFramesSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the ConfirmedDataFramesSent parameter, the check box corresponding to the ConfirmedDataFramesSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is displayed in the channel and controller displays in the Station.

ConfirmTimeOuts

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647

Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This parameter is displayed in the Statistics tab of the channel and controller displays in the Station.

ConfirmTimeOutsOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of ConfirmTimeOuts parameter, the check box corresponding to the ConfirmTimeOutsOverFlow parameter is selected. To reset the value, click the Reset button. This parameter is displayed in the Statistics tab of the channel and controller displays in the Station.

CauseofTransmissionAddress

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – One Octet 1 – Two Octet
Residence	Point Server
Default Value	1 – Two Octet
Access Lock	View Only

Description	Indicates the Length of Cause of Transmission Field Parameter. It can be One Octet or Two Octets. The default value for Protocol Type 60870-5-101 is Two Octets. This parameter is available in the Protocol tab in the controller's configuration form, in Quick Builder. It is also displayed in the Controller's display in the Station.

ChannelMode

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Balanced, 1 – Unbalanced
Residence	Experion, Point Server
Default Value	0 – Balanced.
Access Lock	View Only
Description	Mode can be either Balanced or Unbalanced. If the Port Type is Terminal or Server (in other words, if the protocol type is IEC 60870-5-101), the Mode can be Balanced and Unbalanced. If the protocol type is IEC 60870-5-104 (in other words, if the Port Type selected is Ethernet, the mode can only be Balanced. This parameter is available in the Protocol Parameters tab of the channel's configuration form in Quick Builder. It is also available in the Protocol Parameters tab of the channel's display in the Station.

Checksum

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – NONE 1 – ONESCOMP 2 – TWOSCOMP 3 – XOR 4 – CRC16_0 5 – CRC16_1
Residence	Point Server
Default Value	0 – NONE
Access Lock	View Only
Description	Checksum represents the type of checksum error detection used for the port. The default value is NONE. This parameter is available in the Port tab of the channel's configuration form in Quick Builder.

Clamp

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled (Not Selected) 1 – Enabled (Selected)
Residence	Point Server
Default Value	0 – Disabled (Not Selected)
Access Lock	View Only
Description	If selected, the PointValue is clamped to either 0% (low) or 100% (high) if the value exceeds either low or high limits set for the PV clamp. The PV clamp's high and low limits are defined in Station using the Point Processing tab of the Alarm and Point Processing display.

Class1Class2

Specific to	IEC-870 Point
Type	Enumeration
Range	0 - Class1 1 - Class2
Residence	Point Server
Default Value	1 - Class2
Access Lock	View Only
Description	Represents whether the data that is transmitted is class 1 data or class 2 data. This parameter is available in the Main tab of the point's configuration form in Quick Builder.

Coefficient

Specific to	IEC-870 Point
Type	Real
Range	0.000000001 – 1
Residence	Point Server
Default Value	1
Access Lock	Modifiable
Description	Represents the scaling factor for Analog PointValue value. PointValue = Coefficient * Raw Count + Constant This parameter is available in the Detail tab of the point's configuration form in Quick Builder, when the point is an Analog point. It is also available in the General tab of the Point detail display in the Station, for an Analog point.

CommandExecution

Specific to	IEC-870 RTU Controller, IEC-870 RTU Channel and IEC-870 Point.
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enable or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable
Description	Used to execute a command from the Station. It is set to 1 when a command is executed. When the command execution is complete, it is reset to 0. When multiple Stations are trying to execute the same command, this helps in identifying whether the command can be executed or not, depending on whether the value of this parameter is 0 or 1. It is available in the channel, controller and point detail display in the Station.

CommonAddressOfASDU

Specific to	IEC-870 RTU Controller
Type	Long
Range	1 – 65535
Residence	Point Server
Default Value	1
Access Lock	View Only

Description	The Common Address of ASDU is the "logical device address" for a set of data. All the data in a single "logical device" will use the same Common Address of ASDU value, and this value must be unique across the entire system for each different logical device. The -101 standard permits the data link address to be 0, 1 or 2 octets in size. The Common Address of ASDU can be 1 or 2 octets. This parameter is available in the Protocol tab in the controller's configuration form, in Quick Builder. It is also available in the controller display in the Station.

ConfirmedDataFramesReceived

Specific to	IEC-870 RTU Channel, IEC-870 RTU Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This parameter is available in the Controller and Channel displays in the Station.

ConfirmedDataFramesReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable

Description	If there is an overflow in the value of the ConfirmedDataFramesReceived parameter, the check box corresponding to the ConfirmedDataFramesReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Channel and Controller displays in the Station.

ConnectionEstablishmentTimeoutT0

Specific to	IEC-870 RTU Controller
Type	Integer
Range	1 to 3600 seconds
Residence	Point Server
Default Value	30 seconds
Access Lock	View Only
Description	Represents the timeout of connection establishment. It is specific to protocol 60870-5-104. It has a value 0 to 3600 ms. This parameter is available in the Timers tab of the controller's configuration form in Quick Builder, when the protocol type is 60870-5-104. It is also available in the controller display in the Station.

Constant

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+38 to 3.4E+38
Residence	Point Server
Default Value	0
Access Lock	Modifiable

Description	R Represents the scaling factor for Analog PointValue value. PointValue = Coefficient * RawCount + Constant This parameter is available in the Detail tab of the point's configuration form in Quick Builder, when the point is an Analog point. It is also available in the General tab of the Point detail display in the Station, for an Analog point.
Control	
Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Only Control 1 – Only Input 2 – Control and Input
Residence	Point Server
Default Value	2 - Control and Input
Access Lock	View Only
Description	Indicates whether the control is Only Input, Only Control or Control and Input. This parameter is available in the Main tab of the point's configuration form in Quick Builder. It is also available in the point detail display in the Station.
ControlConfirmation	
Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable

Description	Control Confirmation. This is an optional parameter required if operator confirmation is required on control of points. This parameter is available in the Control tab of a point's configuration form in Quick Builder. It is also available in the point detail display in the Station.

ControllerChannelName

Specific to	IEC-870 RTU Controller
Type	Character
Range	0 to 10 characters
Residence	Experion, Point Server
Default Value	NULL
Access Lock	View Only
Description	Indicates the channel that is selected in the Main tab, while configuring a controller in Quick Builder. This parameter is available in the Main tab of the controller's configuration form in Quick Builder. It is also available in the controller display in the Station.

ControlTimeout

Specific to	IEC-870 Point
Type	Enumeration
Range	1 - 2 3 - 10 4 - 20 5 - 30 6 - 40 7 - 50 8 - 60 9 - 90 10 - 120 11 -180 12 - 240 13 - 300 14 - 600 15 - 1200
Residence	Point Server
Default Value	3 – 10 seconds
Access Lock	Modifiable
Description	The maximum time (in seconds) allowed for the control command to be executed. Note: For standard server points this raises an alarm if the value of a control parameter, such as OutputValue/OutputState, is not correct. After issuing a new control value, the server scans the point to check the point's control value is correct. This parameter is available in the Control tab of point's configuration form in Quick Builder. It is also available in the point detail display in the Station.

ControlInhibit

Specific to	IEC-870 RTU Point
Type	Enumeration
Range	0 – Disable 1 – Enable
Residence	Point Server
Default Value	0 – Disable
Access Lock	Modifiable
Description	Represents that you cannot execute any Control commands from the Station. This parameter is available in the Control tab of the point's configuration form in Quick Builder, when the control type is Only Control or Control and Input.

CounterInterrogationGeneralRequest

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 - 3600 seconds
Residence	Point Server
Default Value	0, if not selected. 1, if selected
Access Lock	View Only
Description	Indicates the polling frequency to be used for the counter interrogation for general request. This parameter is available in the Counter tab of the controller's configuration form in Quick Builder.

CounterinterrogationGroup1

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 to 3600 seconds
Residence	Point Server
Default Value	0, if not selected. 1, if selected
Access Lock	View Only
Description	Indicates the polling frequency to be used for the counter interrogation for group 1. This parameter is available in the Counter tab of the controller's configuration form in Quick Builder.

CounterinterrogationGroup2

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 to 3600 seconds
Residence	Point Server
Default Value	0, if not selected. 1, if selected
Access Lock	View Only
Description	Indicates the polling frequency to be used for the counter interrogation for group 2. This parameter is available in the Counter tab of the controller's configuration form in Quick Builder.

CounterinterrogationGroup3

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 to 3600 seconds
Residence	Point Server
Default Value	0, if not selected. 1, if selected
Access Lock	View Only
Description	Indicates the polling frequency to be used for the counter interrogation for group 3. This parameter is available in the Counter tab of the controller's configuration form in Quick Builder.

CounterinterrogationGroup4

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 to 3600 seconds
Residence	Point Server
Default Value	0, if not selected. 1, if selected
Access Lock	View Only
Description	Indicates the polling frequency to be used for the counter interrogation for group 4. This parameter is available in the Counter tab of the controller's configuration form in Quick Builder.

CounterQualifierGeneralRequest

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – Read 1 - Freeze without Reset 2 - Freeze with Reset 3 - Reset
Residence	Point Server
Default Value	0 – Read
Access Lock	View Only
Description	Indicates the Counter Interrogation Qualifier for General Request. This parameter is available in the Counter tab of the controller's configuration form in Quick Builder.

CounterQualifierGroup1

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – Read 1 – Freeze without Reset 2 – Freeze with Reset 3 – Reset
Residence	Point Server
Default Value	0 – Read
Access Lock	View Only
Description	Indicates the Counter Interrogation Qualifier for Group 1. This parameter is available in the Counter tab of the controller's configuration form in Quick Builder.

CounterQualifierGroup2

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – Read 1 – Freeze without Reset 2 – Freeze with Reset 3 – Reset
Residence	Point Server
Default Value	0 – Read
Access Lock	View Only
Description	Indicates the Counter Interrogation Qualifier for Group 2. This parameter is available in the Counter tab of the controller's configuration form in Quick Builder.

CounterQualifierGroup3

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – Read 1 – Freeze without Reset 2 – Freeze with Reset 3 – Reset
Residence	Point Server
Default Value	0 – Read
Access Lock	View Only
Description	Indicates the Counter Interrogation Qualifier for Group 3. This parameter is available in the Counter tab of the controller's configuration form in Quick Builder.

CounterQualifierGroup4

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – Read 1 – Freeze without Reset 2 – Freeze with Reset 3 – Reset
Residence	Point Server
Default Value	0 – Read
Access Lock	View Only
Description	Indicates the Counter Interrogation Qualifier for Group 4. This parameter is available in the Counter tab of the controller's configuration form in Quick Builder.

CreateTime

Specific to	IEC-870 RTU Channel, IEC-870 RTU Controller and IEC-870 Point
Type	Long
Range	0 to 2147480064
Residence	Experion
Default Value	0
Access Lock	View Only
Description	Create Time indicates the time the item was created.

ControlLevel

Specific to	IEC-870 Point
Type	Long
Range	0 to 255
Residence	Experion, Point Server
Default Value	0

Access Lock	Modifiable
Description	The minimum control level (between 0 and 255) required to perform supervisory control on this point. This parameter is available in the Control tab of the point's configuration form in Quick Builder. It is also available in the point detail display in the Station.

ConfirmACKFramesReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the Number of CONFIRM - ACK frames successfully received. This parameter is available in the channel and controller's station displays.

ConfirmACKFramesReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the ConfirmACKFramesReceived parameter, the check box corresponding to ConfirmACKFramesReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the channel and controller station displays.

ConfirmACKFramesSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the Number of CONFIRM - ACK frames successfully sent. This parameter is available in the channel and controller station displays.

ConfirmACKFramesSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the ConfirmACKFramesSent parameter, the check box corresponding to the ConfirmACKFramesSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the channel and controller station displays in the Statistics tab.

ConfirmNACKFramesReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the Confirm NACK Frames successfully received. This parameter is available in the channel and controller station displays in the Statistics tab.

ConfirmNACKFramesReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the ConfirmNACKFramesReceived parameter, the check box corresponding to the ConfirmNACKFramesReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display.

ConfirmNACKFramesSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller.
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the Number of CONFIRM - NACK frames successfully sent. This parameter is available in the channel and controller station displays. This parameter is available in the channel and controller station displays.

ConfirmNACKFramesSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the ConfirmNACKFramesSentOverFlow parameter, the check box corresponding to the ConfirmNACKFramesSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display.

2.4 D

DATimeOut

Specific to	IEC-870 RTU Controller
Type	Integer
Range	1 to 3600 seconds
Residence	Point Server
Default Value	10 seconds
Access Lock	View Only
Description	Represents the timer for each of the messages sent from the host to the RTU. This parameter is available in the Protocol tab in the controller's configuration form, in Quick Builder. It is also available in the controller display in the Station in the Protocol Parameters tab.

DefaultOverride

Specific to	IEC-870 RTU Point
Type	Enumeration
Range	0 – Disable 1 – Enable
Residence	Point Server
Default Value	0 – Disable
Access Lock	Modifiable

Description	Represents that the formula **PointValue (new) = PointValue (old) + (scale factor x meter factor x raw counts) The default value is 1.** used for calculating the value of PV is ignored and the formula **PointValue (new) = Scale Factor x Meter Factor x raw counts.** is used. This parameter is available in the Detail tab in the point's configuration form, in Quick Builder for the Accumulator point.
Description	
Specific to	IEC-870 RTU Channel, IEC-870 Point or IEC-870 RTU Controller
Type	Characters
Range	0 to 30 alphanumeric characters
Residence	Experion
Default Value	Null String
Access Lock	View Only
Description	Description that you can enter for the Channel, Point or Controller. This parameter is available in the Main tab of Channel, Controller and the Point's configuration form in Quick Builder. It is also available in the channel, point and controller displays in the Station.
DetectDCD	
Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected

Access Lock View Only

Description Detect DCD enables monitoring of the Data Carrier Detect communication status of the COM port requires monitoring (usually when using modem or microwave linking).

When selected, the communication fails if the desired COM status line is not high — for example, on a dial-up link connection for a modem.

This parameter is available in the Port tab and the Redundant Port tab (in a redundant configuration) of the channel's configuration form in Quick Builder.

DetectDSR

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	View Only
Description	Detect DSR enables you to monitor Data Set Ready communication status line of the COM port (usually when using modem or microwave linking). When selected, the communications fails if the desired COM status is not achieved. This parameter is available in the Port tab and the Redundant Port tab (in a redundant configuration) of the channel's configuration form in Quick Builder.

DisableModeCheckingOnOutput

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable

Description Disable mode checking on output represents that operators can check parameter values regardless of point's mode, if you select this check box. If it is cleared, the server checks the mode before allowing an operator to change a parameter value. (If the mode is set to AUTO, the operator is not allowed to change the value.)

This parameter is available in the Control tab of the point's configuration form, when the control type is Only Control or Control and Input.

This parameter is also available in the point detail display in the Station.

DeviceCommands101

Specific to IEC-870 Controller

Type Enumeration

Range
0 – Interrogation Global
1 – Interrogation Group1
2 – Interrogation Group2
3 – Interrogation Group3
4 – Interrogation Group4
5 – Interrogation Group5
6 – Interrogation Group6
7 – Interrogation Group7
8 – Interrogation Group8
9 – Interrogation Group9
10 – Interrogation Group10
11 – Interrogation Group11
12 – Interrogation Group12
13 – Interrogation Group13
14 – Interrogation Group14
15 – Interrogation Group15
16 – Interrogation Group16
17 – Counter Interrogation General Read
18 – Counter Interrogation Group1 Read

19 – Counter Interrogation Group2 Read
20 – Counter Interrogation Group3 Read
21 – Counter Interrogation Group4 Read
22 – Counter Interrogation General Freeze without Reset
23 – Counter Interrogation Group1 Freeze without Reset
24 – Counter Interrogation Group2 Freeze without Reset
25 – Counter Interrogation Group3 Freeze without Reset
26 – Counter Interrogation Group4 Freeze without Reset
27 – Counter Interrogation General Freeze with Reset
28 – Counter Interrogation Group1 Freeze with Reset
29 – Counter Interrogation Group2 Freeze with Reset
30 – Counter Interrogation Group3 Freeze with Reset
31 – Counter Interrogation Group4 Freeze with Reset
32 – Counter Interrogation General Reset
33 – Counter Interrogation Group1 Reset
34 – Counter Interrogation Group2 Reset
35 – Counter Interrogation Group3 Reset
36 – Counter Interrogation Group4 Reset
37 – Clock Synchronization
38 – Test
39 – Reset Process General Reset of Process
40 – Reset Process Reset of Pending Information with time tag of the event buffer
41 – Delay Acquisition
42 – File Download

Residence Point Server

Default Value 0 – Interrogation Global

Access Lock Modifiable

Description Used to execute the channel commands like Counter Interrogation, Clock Synchronization, Test, Reset Process and Delay Acquisition command from the Station.
This parameter is located in the Command tab of the channel display.

DeviceCommands104

Specific to IEC-870 Controller

Type Enumeration

Range
0 – Interrogation Global
1 – Interrogation Group1
2 – Interrogation Group2
3 – Interrogation Group3
4 – Interrogation Group4
5 – Interrogation Group5
6 – Interrogation Group6
7 – Interrogation Group7
8 – Interrogation Group8
9 – Interrogation Group9
10 – Interrogation Group10
11 – Interrogation Group11
12 – Interrogation Group12
13 – Interrogation Group13
14 – Interrogation Group14
15 – Interrogation Group15
16 – Interrogation Group16
17 – Counter Interrogation General Read
18 – Counter Interrogation Group1 Read
19 – Counter Interrogation Group2 Read
20 – Counter Interrogation Group3 Read
21 – Counter Interrogation Group4 Read
22 – Counter Interrogation General Freeze without Reset
23 – Counter Interrogation Group1 Freeze without Reset
24 – Counter Interrogation Group2 Freeze without Reset
25 – Counter Interrogation Group3 Freeze without Reset
26 – Counter Interrogation Group4 Freeze without Reset
27 – Counter Interrogation General Freeze with Reset
28 – Counter Interrogation Group1 Freeze with Reset

29 – Counter Interrogation Group2 Freeze with Reset
30 – Counter Interrogation Group3 Freeze with Reset
31 – Counter Interrogation Group4 Freeze with Reset
32 – Counter Interrogation General Reset
33 – Counter Interrogation Group1 Reset
34 – Counter Interrogation Group2 Reset
35 – Counter Interrogation Group3 Reset
36 – Counter Interrogation Group4 Reset
37 – Clock Synchronization
38 – Test
39 – Reset Process General Reset of Process
40 – Reset Process Reset of Pending Information with time tag of the event buffer
42 – File Download

Residence Point Server

Default Value 0 – Interrogation Global

Access Lock Modifiable

Description Used to execute the controller commands like Counter Interrogation, Clock Synchronization, Test and Reset Process command from the Station.

This parameter is located in the Command tab of the controller display.

DownloadFilePath

Specific to IEC-870 RTU Controller

Type CHAR

Range 260

Residence Point Server

Default Value NULL

Access Lock Modifiable

Description

DownloadFilepath is used in congection with Device Commands (Device101Commands and Device!04Commands) for File Download.

This parameter is located in the Command tab of the controller display.

2.5 E

Echo

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	View Only
Description	Echo (Required for Stallion RS-485 ports) represents that the server expects the messages it sends to the port on the transmit line to be echoed back on the receive line. Enable this parameter for a Stallion EasyConnection adapter or a Black Box converter. This parameter is available in the Port of the channel's configuration form in Quick Builder.

Edition

Specific to	IEC-870 RTU Channel, IEC 780 RTU Controller
Type	Enumeration
Range	1 – Protocol Edition First 2 – Protocol Edition Second.
Residence	Point Server
Default Value	If the protocol is 60870- 5-101 then it is 2 – Edition Second. If it is 60870-5-104, then it is 1 – Edition One.
Access Lock	View Only

Description	Indicates the edition of the protocol. If the protocol is 60870-5-101, then the edition supported is 2. If the protocol is 60870-5-104, the edition supported is 1. Edition in the Channel's configuration form displays the edition of the protocol in the Protocol Parameters tab. It is a read-only field. The value is automatically populated based on the port type selected in the Port tab, while configuring the channel. Edition in the Controller's configuration form displays the edition of the protocol in the Main tab. It's a read-only field. It is populated according to the protocol type selected from the Protocol Type list box.

EnableChannel

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable
Description	Enables the channel when selected in the channel display from the Station.

EnableClockSyncEvent

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – Disabled or Not selected 1 – Enabled or Selected.
Residence	Point Server
Default Value	1 – Enabled or Selected
Access Lock	View Only

Description	Ensures that an event is raised each time the time synchronization happens with the RTU. This parameter is available in the Clock Sync tab of the controller's configuration form in Quick Builder. This parameter is also available in the controller's Station display.

EnableClockSyncProcedure

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – Disabled or Not selected 1 – Enabled or Selected.
Residence	Point Server
Default Value	1 – Enabled or Selected
Access Lock	View Only
Description	This parameter enables the clock synchronization procedure. It is available in the Clock Sync tab of the controller's configuration form in Quick Builder.

EnableController

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Experion, Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable
Description	Enables the controller when selected. This parameter is available

EnableRTSCTSFlowControl

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Disabled or Not selected 1 – Enabled or Selected.
Residence	Point Server
Default Value	0 – Disabled or Not selected
Access Lock	View Only
Description	Stops a receiver from being overrun with messages from a sender by using RTS/CTS flow control.

EnableStallionRS485HalfDuplex

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Disabled or Not selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not selected
Access Lock	View Only
Description	Enables you to communicate from RS-232 to RS-485 using a Stallion EasyConnection adapter

EnableTxDelayAcquisitionProcedure

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – Disabled or Not selected 1 – Enabled or Selected.
Residence	Point Server
Default Value	1 – Enabled or Selected.
Access Lock	View Only
Description	Enable Tx Delay Acquisition Procedure acquires the delay in transmission, if it is not fixed delay. If this check box is enabled, this procedure is enabled. This parameter is available in the Clock Sync tab of the controller's configuration form in Quick Builder. It is available, only when the protocol type is 60870-5-101.

EngineeringUnit

Specific to	IEC-870 Point
Type	Character
Range	0 - 8
Residence	Point Server

Default Value	NULL
Access Lock	Modifiable
Description	Represents the engineering unit that the PointValue value represents, for an analog point. This parameter is available in the Detail tab of the point's configuration form in Quick Builder. It is applicable when the point type is Analog. It is also available in the Station in the point detail display.

EULO

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+38 to 3.4E+38
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Represents the lowest register value for the PointValue for an analog point. If the parameter value has been scaled by specifying a scaling data format, this value equals 0% (the default) of the register range. This parameter is available in the Detail tab of the point's configuration form in Quick Builder. It is applicable when the point type is Analog. If the control type is Only Control, then this parameter is not applicable. It is also available in the Station in the point detail display.

EUHI

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+38 to 3.4E+38
Residence	Point Server

Default Value 100

Access Lock Modifiable

Description EUHI Value depicts the 100% value for an analog point.

EUHI Value represents the highest register value for the PointValue. If the PointValue is scaled by specifying a data format, then the number that represents the highest register value must be specified. If no data format has been used, the default value of 100% must be specified.

This parameter is available in the Detail tab of the point's configuration form in Quick Builder. It is applicable when the point type is Analog. If the control type is Only Control, then this parameter is not applicable.

It is also available in the Station in the point detail display.

2.6 F

FailAlarmLimit

Specific to	IEC-870 RTU Channel
Type	Integer
Range	0 – 10000
Residence	Point Server
Default Value	50
Access Lock	Modifiable
Description	The communications alarm fail limit at which the channel is declared to have failed. When this barometer limit is reached, an urgent alarm is generated. Set this to double the value specified for the channel Marginal Alarm Limit. Available in the Main tab of the Channel in Quick Builder and also in the Station display for the Channel.

FixedTxDelay

Specific to	IEC-870 RTU Controller.
Type	Integer
Range	1 to 32767
Residence	Point Server
Default Value	0
Access Lock	MNGR

Description	Represents if there is a fixed delay in transmission of communication data. This parameter is available in the Clock Sync tab of the controller's configuration form in Quick Builder. This is also available in the Station display for the controller. It is available only when the protocol type is 60870-5-101. This parameter appears disabled if the Enable Tx Delay Acquisition Procedure check box is selected.

FramesSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the number of frames successfully sent. This parameter is available in the Statistics tab of the controller and channel statistics parameters.

FramesSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable

Description

If there is an overflow in the value of the FramesSent parameter, the check box corresponding to the FramesSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display.

FramesSentFailed

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the number of frames sent failed.

FramesSentFailedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the FramesSentFailed parameter, the check box corresponding to the FramesSentFailedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display.

FramesReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long Integer
Range	0 – 2147483647
Residence	Point Server
Default Value	0

Access Lock	Modifiable
Description	This parameter stores the value of frames received.

FramesReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the FramesReceived parameter, the check box corresponding to the FramesReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display.

FrameTimeOuts

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This parameter stores the number of frame timeouts.

FrameTimeOutsOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the FrameTimeOuts parameter, the check box corresponding to the FrameTimeOutsOverFlow parameter is selected. To reset the value, click the Reset button corresponding to this parameter.

FramesRejectedNoBuffersWereAvailable

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of frames that were rejected as no buffers were available.

FramesRejectedNoBuffersWereAvailableOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow

Access Lock	Modifiable
Description	If there is an overflow in the value of the FramesRejectedNoBuffersWereAvailable parameter, the check box corresponding to the FramesRejectedNoBuffersWereAvailableOverFlow parameter is selected. To reset the value, click the Reset button.

FileTransfer

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – Disable 1 – Enable
Residence	Point Server
Default Value	0 - Disable
Access Lock	View Only
Description	File Transfer is used for Enabling / Disabling File Transfer Feature

FileIOA

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	1 – 16777215 (Depends on the Value of **StartFileIOA** and **NoofFiles** parameter
Residence	Point Server
Default Value	1
Access Lock	Modifiable
Description	FileIOA is used to in File Download Command.

2.7 G

GroupNumber

Specific to	IEC-870 Point
Type	Integer
Range	0 to 9999
Residence	Experion, Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the operating group this point will be assigned to. This parameter is available in the Display tab of the point's configuration form in Quick Builder.

GroupFaceplateTemplateDisplay

Specific to	IEC-870 Point
Type	Character
Range	0 - 255
Residence	Experion, Point Server
Default Value	Default
Access Lock	Modifiable
Description	Group Faceplate Template Display represents the group faceplate template display that is used to display point information when the point is part of a group. This parameter is available in the Display tab of the point configuration form in Quick Builder.

GuaranteedTimeRequestExpirations

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display
Type	Long
Range	0 - 2147483647

Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value for the guaranteed time request expirations. This parameter is available in the Statistics tab of the Channel and Controller displays in the Station.

GuaranteedTimeRequestExpirationsOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	View Only
Description	If there is an overflow in the value of the GuaranteedTimeRequestExpirations parameter, the check box corresponding to the GuaranteedTimeRequestExpirationsOverFlow parameter is selected. To reset the value, click the Reset button.

2.8 I

IdleTestTimeoutT3

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 to 3600
Residence	Point Server
Default Value	20
Access Lock	View Only
Description	Represents time-out period for sending test frames in case of a long idle state. Enter a value ranging from 0 to 3600 milliseconds in steps of 1. This parameter is available in the Timers tab of the controller's configuration form in Quick Builder, when the protocol type is 60870-5-101.

IdleTimeout

Specific to	IEC-870 RTU Channel
Type	Integer
Range	0 to 3600
Residence	Point Server
Default Value	180 seconds
Access Lock	View Only

Description	Idle Timeout represents the time (in seconds) that the channel waits for a successful connection to the server before closing the connection. A value of 0 indicates that the connection is never closed. Set idle timeout to a number greater than the fastest polling period on the channel. This also applies to the idle timeout configured in the terminal server. This parameter is available in the Port tab of the channel's configuration form in Quick Builder. In a redundant configuration, this parameter is also available in the Redundant Port tab.

InterrogationGroup

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Not Used, 1 – Group 1 2 – Group 2 3 – Group 3 4- Group 4 5 – Group 5 6 – Group 6 7 – Group 7 8 – Group 8 9 – Group 9 10 – Group 10 11 – Group 11 12 – Group 12 13 – Group 13 14 – Group 14 15 – Group 15 16 – Group 16
Residence	Point Server

Default Value	0 - Not Used
Access Lock	View Only
Description	Interrogation Group represents the station interrogation group that is used. This parameter is available in the Main tab of the point's configuration form, in Quick Builder.

IPAddressforRTU

Specific to	IEC-870 RTU Controller
Type	Character 16 [34 is mentioned in the excel sheet]
Range	0.0.0.0 to 255.255.255.255
Residence	Point Server
Default Value	0.0.0.0
Access Lock	View Only
Description	Indicates the IP Address of the RTU entered in the Port tab, while configuring the channel. This parameter is available in the Port tab of the channel's configuration form in Quick Builder. It is also available in the Protocol Parameters tab of the channel's display in the Station.

Invalid

Specific to	Single Point Information without Time Tag
Type	Invalid
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Experion, Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable
Description	If this value is set in the message, this flag is set but the PV

value is not changed with the PV appearing in the message.

IFramesSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of IFrames sent. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

IFramesSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the IFramesSent parameter, the check box corresponding to the IFramesSentOverFlow is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

IFramesWasReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Integer
Range	0 -255
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the number of IFrames received. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

IFramesWasReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the IFramesWasReceived parameter, the check box corresponding to the IFramesWasReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

InvalidFunctionCodeErrors

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long

Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This parameter stores the value of invalid function code errors. It is available in the Statistics tab of the controller and channel's displays in the Station.

InvalidFunctionCodeErrorsOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the InvalidFunctionCodeErrors, the check box corresponding to the InvalidFunctionCodeErrorsOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

Invalidframesdroppedoflinklayerproblems

Specific to	IEC-870 RTU Channel and Controller – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable

Description	This parameter keeps a count of the invalid frames dropped due to application layer related problems for the controller and channel. It is displayed in the Controller and Channel's station displays in the Statistics tab.

InvalidFramesDroppedOfApplicationLayerProblems

Specific to	IEC-870 RTU Channel and Controller – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This parameter keeps a count of the invalid frames dropped due to application layer related problems for the controller and channel. It is displayed in the Controller and Channel's station displays in the Statistics tab.

InvalidFramesDroppedOfApplicationLayerProblemsOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable

Description	If there is an overflow in the value of the InvalidFramesDroppedOfApplicationLayerProblems parameter, the check box corresponding to the InvalidFramesDroppedOfApplicationLayerProblems OverFlow parameter is selected. To reset the value, click the Reset button.

InvalidStartCharacters

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of invalid start characters. This parameter is available in the Statistics tab of the Channel and Controller's displays in the Station.

InvalidStartCharactersOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the InvalidStartCharacters parameter, the check box corresponding to the InvalidStartCharactersOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display.

InvalidLengthErrors

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of invalid length errors. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

InvalidLengthErrorsOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the InvalidLengthErrors parameter, the check box corresponding to the InvalidLengthErrorsOverflow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display.

InvalidAddressesDetected

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Integer
Range	0 – 255
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of invalid addresses detected. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

InvalidAddressesDetectedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the InvalidAddressesDetected parameter, the check box corresponding to the InvalidAddressesDetectedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

InvalidFramesDroppedOfLinkLayerProblemsOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of InvalidFramesDroppedOfLinkLayerProblems parameter, the check box corresponding to the InvalidFramesDroppedOfLinkLayerProblemsOverFlow parameter is selected. To reset the value, click the Reset button. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

InvalidChecksumErrors

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of invalid checksum errors. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

InvalidChecksumErrorsOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	If there is an overflow in the value of the InvalidChecksumErrors parameter, the check box corresponding to the InvalidChecksumErrorsOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

InvalidEndCharacters

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This parameter stores the number of invalid end characters. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

InvalidEndCharactersOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the InvalidEndCharacters parameter, the check box corresponding to the InvalidEndCharacters OverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

InvalidFCBBitInTheControlOctet

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of invalid FCB bits in the control octet. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

InvalidFCBBitInTheControlOctetOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the InvalidFCBBitInTheControlOctet parameter, the check box corresponding to the InvalidFCBBitInTheControlOctetOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

InvalidFCVBitInTheControlOctet

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of invalid FCV bits in the control octet. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

InvalidFCVBitInTheControlOctetOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the InvalidFCVBitInTheControlOctet parameter, the check box corresponding to the InvalidFCVBitInTheControlOctetOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the controller and channel's displays in the Station.

2.9 L

LengthofCauseofTransmissionFieldParameter

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 - One Octet 1 - Two Octet
Residence	Point Server
Default Value	0 - One Octet for Protocol Type 60870-5-101. 1 - Fixed at One octet for Protocol Type 60870-5-104.
Access Lock	View Only
Description	**Length of Cause of Transmission Field Parameter** can be One Octet or Two Octets. The default value for this is Two Octets. This parameter is available in the Protocol tab in the controller's configuration form, in Quick Builder. It is also available in the Protocol Parameters tab of the controller's display in the Station.

LengthOfCommonAddressOfASDUParameter

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 - One Octet 1 - Two Octet
Residence	Point Server
Default Value	1 - Two Octet
Access Lock	View Only

Description	Length of Common address of ASDU Parameter can be One Octet or Two Octet. This parameter is available in the controller's Protocol tab, in Quick Builder. It is also available in the Protocol Parameters tab of the controller's display in the Station.

LengthOfInformationObjectAddressParameter

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 - One Octet 1 - Two Octet 2 - Three Octet
Residence	Point Server
Default Value	2 - Three Octets for Protocol Type 60870-5-101. 3 - Fixed at three octet for Protocol Type 60870-5-104.
Access Lock	View Only
Description	**Length of Information Object Address Parameter** can be One Octet, Two Octets or Three Octets. The default value is Three Octets for Protocol Type 60870-5-101. The value is fixed at Three Octets for Protocol Type 60870-5-104. This parameter is available in the Protocol tab of the controller's configuration form in Quick Builder. It is also available in the Protocol Parameters tab of the controller's display in the Station.

LengthofLinkAddress

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Not Used 1 – One Octet 2 – Two Octet
Residence	Point Server
Default Value	1 – Two Octet
Access Lock	View Only
Description	**Length of Link Address** can have three values: **One Octet** or **Second Octet**. Select **One Octet** or **Second Octet**, if the Port Type is Serial or Terminal Server (in other words, if the protocol type is **IEC 60870-5-101**). The default value is Two Octets. If the port type is Ethernet (in other words, if the protocol type is **IEC 60870-5-104**), Port Address is not applicable and Quick Builder does not display this field in the Protocol Parameter tab. This parameter is available in the Protocol Parameters tab of the channel's configuration form in Quick Builder, when the selected port type is Serial or Terminal Server. It is also available in the Protocol Parameters tab of the channel's display in the Station.

LinkAddress

Specific to	IEC-870 RTU Controller
Type	Long
Range	1 to 255 for One Octet 1 to 65535 for Two Octet
Residence	Point Server
Default Value	1

Access Lock	View Only
Description	Link Address specifies the station address. It is transmitted in frames from stations that initiate a data transmission service (primary station) to receiving stations and specifies the destination address. This parameter is available in the Main tab of the controller's configuration form in Quick Builder. It is also available in the Protocol Parameters tab of the controller's display in the Station.

LogLevels

Specific to	IEC 870-5 protocols
Type	Integer
Range	0-1024
Residence	Point Server
Default Value	896
Access Lock	Modifiable
Description	Indicates the log levels maintained for the IEC – 60870 protocol-level transactions.

2.10 M

ModeState

Specific to	IEC-870 Point
Type	Enumeration
Range	0 - MAN 1 - AUTO
Residence	Point Server
Default Value	0 – MAN
Access Lock	Modifiable
Description	Represents the normal mode for this point, which it is reset to after a control. The modes are: AUTO (default). The controller (or server) controls the output and operators cannot change the output value. MAN. The operator is permitted to change either the OutputState/OutputValue. This parameter is available in the faceplate of the point's detail display when the Control Type is Only Control or Control and Input.

ManualOverwrite

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disable 1 – Enable
Residence	Point Server
Default Value	0 – Disable
Access Lock	Modifiable

Description	Represents that you can manually overwrite the PV value from the Station, by entering the required PV value in the Point Detail Display. This parameter is available in the Control tab in the point's configuration form, in Quick Builder, when the Control Type is Only Input or Control and Input.

MarginalAlarmLimit

Specific to	IEC-870 RTU Channel
Type	Integer
Range	1 to 10000
Residence	Point Server
Default Value	25
Access Lock	Modifiable
Description	The communications alarm marginal limit at which the channel is declared to be marginal. When this limit is reached, a high priority alarm is generated. The default value is 25. This parameter is available in the Main tab of the Channel in Quick Builder. It is also available in the General tab of the channel display in the Station.

MasterAddress

Specific to	IEC-870 RTU Channel
Type	Integer
Range	0 to 255
Residence	Point Server
Default Value	0
Access Lock	Engineer

Description

Indicates the master address in the balanced link type. Master Address is available only if the port type is Serial or Terminal Server (in other words, if the protocol type is IEC 60870-5-104.) AND the selected Mode in the Protocol Parameters tab is Balanced.

Quick Builder does not display this field, if you select the port type as Ethernet (in other words, if the protocol type is IEC 60870-5-101.)

This parameter is available in the Protocol Parameters tab in the channel's configuration form in Quick Builder, when the port type is Serial or Terminal Server.

It is also displayed in the Protocol Parameters tab of the channel's display in the Station, when the protocol is 60870-5-104.

MaxRcvw

Specific to	IEC-870 RTU Controller
Type	Integer
Range	1 to 128
Residence	Point Server
Default Value	8
Access Lock	View Only
Description	Represents the latest the receiver acknowledges after receiving w I format frames. This parameter is applicable only if the protocol type is 60870-5-104. This parameter is available in the Protocol tab in the controller's configuration form, in Quick Builder, when the protocol type is 60870-5-104. It is also available in the Protocol Parameter tab of the controller's display in the Station, when the protocol type is 60870-5-104.

MaxXMTk

Specific to	IEC-870 RTU Controller
Type	Integer
Range	1 to 128
Residence	Point Server
Default Value	12
Access Lock	View Only
Description	This parameter is specific to 60870-5-104 protocol. It represents the maximum number of sequentially numbered I format APDUs. This parameter is available in the Protocol tab in the controller's configuration form, in Quick Builder, when the Protocol Type is 60870-5-104.

ManualUpdate

Specific to	IEC-870 Point
Type	Enumeration
Range	0 - FALSE 1 – TRUE
Residence	Point Server
Default Value	0 - FALSE
Access Lock	View Only
Description	ManualUpdate file is used to indicate the user that the data is from RTU or the data is Manual overwrite data. This parameter is not in standard display. Can be used in custom display

2.11 N

Name

Specific to	IEC-870 RTU Channel, IEC-870 RTU Controller and IEC-870 Point.
Type	Characters
Range	1 to 40 characters
Residence	Experion
Default Value	NULL
Access Lock	View Only
Description	Unique name of the point. This name needs to be engineered to be unique system wide and is often referred to as a PointID or PointName. This parameter is available in the Main tab of the Channel, Controller and Point's configuration form in Quick Builder. It is also available in the channel, controller and point displays in the Station.

NormalMode

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – MAN 1 – AUTO
Residence	Point Server
Default Value	0 – MAN
Access Lock	Modifiable

Description	Normal Mode represents the normal mode for this point, which it is reset to after a control. The modes are: AUTO (default). The controller (or server) controls the output and operators cannot change the output value. MAN. The operator is permitted to change either the OutputValue/OutputState. This parameter is available in the Control tab of the point's configuration form, when the Control Type is Only Control or Control and Input.

NonTopical

Specific to	Single Point Information without Time Tag
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Experion, Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	View Only
Description	When this bit is set it means that the parameter is TRUE and when the bit is clear it means that the parameter is FALSE. This parameter value is updated from the field of the message and then put up.

Numberofdatabits

Specific to	IEC-870 RTU Channel
Type	Integer
Range	8
Residence	Point Server
Default Value	8
Access Lock	View Only

Description	Number of Data Bits indicates the number of data bits used for transmission. This parameter is available in the Port and Redundant Port tab (if applicable, in a redundant configuration) of the channel's configuration form in Quick Builder.

NoofFiles

Specific to	IEC-870 RTU Controller
Type	Integer
Range	1 – 32767
Residence	Point Server
Default Value	1
Access Lock	View only
Description	Noof Files is used to configure the IOA Address for File Transfer

2.12 O

ObjectAddress

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 - Structured 1 - Unstructured
Residence	Point Server
Default Value	1 - Unstructured
Access Lock	View Only
Description	Object Address indicates whether the address is Structured or Unstructured. Note: The current release supports only Unstructured. This parameter is available in the Protocol tab in the controller's configuration form, in Quick Builder. It is also available in the Protocol Parameters tab of the controller's display in the Station.

OnScan

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disable 1 – Enable
Residence	Point Server
Default Value	0 – Disable
Access Lock	Modifiable
Description	This parameter is available in the Main tab of the point's configuration form in Quick Builder. It is also available in the General tab of the Point Detail Display in the Station. Once set, the Point Server value is set via the display and the value from PVRAW is taken from the protocol stack.

OPObjectType

Specific to	IEC-870 Point
Type	Enumeration
Range	1 - M_SP_NA_1 2 - M_SP_TA_1 3 - M_DP_NA_1 4 - M_DP_TA_1 5 - M_ST_NA_1 6 - M_ST_TA_1 7 - M_BO_NA_1 8 - M_BO_TA_1 9 - M_ME_NA_1 10 - M_ME_TA_1 11 - M_ME_NB_1 12 - M_ME_TB_1 13 - M_ME_NC_1 14 - M_ME_TC_1 15 - M_IT_NA_1 16 - M_IT_TA_1 17 - M_EP_TA_1 18 - M_EP_TC_1 19 - M_PS_NA_1 20 - M_ME_ND_1 21 - M_SP_TB_1 22 - M_DP_TB_1 23 - M_ST_TB_1 24 - M_BO_TB_1 25 - M_ME_TD_1 26 - M_ME_TE_1 27 - M_ME_TF_1 28 - M_IT_TB_1 29 - M_EP_TD_1

30 - M_EP_TE_1
31 - M_EP_TF_1
32 - C_SC_NA_1
33 - C_DC_NA_1
34 - C_RC_NA_1
35 - C_SE_NA_1
36 - C_SE_NB_1
37 - C_SE_NC_1
38 - C_BO_NA_1
39 - C_SC_TA_1
40 - C_DC_TA_1
41 - C_SE_TA_1
42 - C_SE_TB_1

Residence Point Server

Default Value Status Point – Single Point
Analog Point – Norm Value
Accumulator Point – Integ Totals

Access Lock View Only

Description Represents the type of object depending on whether the point type is Status Point, Accumulator Point or Analog Point.

This parameter is available in the Main tab of the point's configuration form in Quick Builder.

It is also available in the General tab of the point's display in the Station.

OPObjectAddress

Specific to IEC-870 Point

Type Long Integer

Range For One Octet: 1 to 255
For Two Octet: 1 to 65535
For Three Octet: 1 to 16777215

Residence Point Server

Default Value 1

Access Lock View Only

Description OP Object Address represents the information object address for OP. In other words, the location from which to scan the OP. Depending upon the number of octets selected, the information object address can be:

- 1 to 255 (note 0 is not used) if the size is 1 octet
- 1 to 65535, if the size is 2 octet
- 1 to 16777215, if the size is 3 octet

This parameter is available in the Main tab of the point's configuration form in Quick Builder.

It is also available in the Scanning tab of the point's display in the Station.

OutputState

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Value of CommandText1 1 – Value of CommandText2
Residence	Point Server
Default Value	0 – Value of CommandText1
Access Lock	Modifiable
Description	This parameter is used to give Control command on Status point.

OutputValue

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+14 to 3.4E+14
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This parameter is used to give Control command on Analog point.

Overflow

Specific to	IEC RTU Point
Type	Enumeration
Range	0 – Disabled or Not Selected (False - No overflow) 1 – Enabled or Selected (True-Overflow)
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable

Description This parameter indicates if there is an overflow in the value of a particular statistics parameter.

2.13 P

ParameterLoadingValue

Specific to	IEC RTU Point
Type	Real
Range	-3.4E+14 to 3.4E+14
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	The value stored in this parameter is used for executing Parameter Loading command.

Parity

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Even 1 – Odd 2 – None
Residence	Point Server
Default Value	0 – Even
Access Lock	View Only
Description	Parity indicates the parity verification used on the port. This parameter is available in the Port and Redundant Port in the channel's configuration form in Quick Builder.

Period

Specific to	IEC-870 RTU Controller
Type	Integer
Range	1 to 3600 seconds
Residence	Point Server
Default Value	30 seconds

Access Lock	View Only
Description	Indicates the frequency of executing the clock synchronization period in seconds. This parameter is available in the Clock Sync tab of the controller's configuration form in Quick Builder.

PointControllerName

Specific to	IEC-870 Point
Type	Characters
Range	1 to 10 characters.
Residence	Point Server
Default Value	NULL
Access Lock	View Only
Description	Indicates the controller that is selected while configuring the Main tab of the IEC-60870 Point. This parameter is available in the Main tab of the point's configuration form in Quick Builder. It is also available in the point detail display in the Station.

PointDetailDisplay

Specific to	IEC-870 RTU Channel
Type	Character
Range	0 – 255
Residence	Experion, Point Server
Default Value	Default
Access Lock	Modifiable
Description	The name of the point detail display page for this point. The default display for the 870 device shall be sysDtl870Dev.htmThe detail display for the 60870 can be changed from Quick Builder during configuration.

This parameter is available in the Display tab of the point's configuration form in Quick Builder.

PointState

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Value of State0 1 – Value of State1 2 – Value of State2 3 – Value of State3
Residence	Point Server
Default Value	0 – Value of State0
Access Lock	Modifiable
Description	This value is set equal to RAW Count if ScanInhibit is FALSE. If ScanInhibit is TRUE then the value set from the display is set. This value is fetched from the RTU and displayed in the point display's faceplate in the station.

PointTypes

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Status Point 1 – Analog Point 2 – Accumulator
Residence	Point Server
Default Value	0 – Status Point
Access Lock	View Only
Description	Indicates the point type – Status Point, Analog Point and Accumulator Point. This parameter is available in the Main tab of the point's configuration form in Quick Builder.

PortType

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Serial 1 – Terminal Server 2 – Ethernet
Residence	Point Server
Default Value	0 – Serial
Access Lock	View Only
Description	Port Type indicates the type of port - Serial, Terminal Server or Ethernet. This parameter is available in the Port tab of the Channel's configuration form in Quick Builder.

PositionInGroup

Specific to	IEC-870 Point
Type	Integer
Range	0 to 8
Residence	Experion, Point Server
Default Value	0
Access Lock	Modifiable
Description	Position in Group represents the position of the point in the operating group - 0 to 8. This parameter is available in the Display tab of the point's configuration form in Quick Builder.

PositionInTrendSet

Specific to	IEC-870 Point
Type	Integer
Range	0 to 8
Residence	Experion, Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the position of this point in the trend set. This parameter is available in the Display tab of the point's configuration form in Quick Builder.

ProtocolType

Specific to	IEC-870 RTU Channel, IEC-870 RTU Controller
Type	Enumeration
Range	0 – 60870-5-101 1 – 60870-5-104
Residence	Point Server
Default Value	0 – 60870-5-101
Access Lock	View Only
Description	Protocol Type represents the type of the protocol. It can either be 60870-5-101 OR 60870-5-104. If the Port Type is Serial or Terminal Server, the protocol type can be 60870-5-101. If the Port Type is Ethernet, the protocol type can only be 60870-5-104. This parameter is available in the Channel's Protocol Parameter's tab and the Controller's Main tab in Quick Builder.

PointValue

Specific to	IEC-870 Point
Type	Real
Range	-3.4E+14 to 3.4E+14
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This value is set equal to Raw Count if ScanInhibit is FALSE. If ScanInhibit is TRUE then the value set from the display is set. This value is fetched from the RTU and displayed in the point display's faceplate in the station.

PVLastProcessedTime

Specific to	IEC-870 Point
Type	Character
Range	0-255
Residence	Point Server
Default Value	00:00:00:00
Access Lock	Modifiable
Description	This parameter displays the time when the PointValue/PointState was last processed.

PVObjectType

Specific to	IEC-870 Point
Type	Enumeration
Range	1 - M_SP_NA_1 2 - M_SP_TA_1 3 - M_DP_NA_1 4 - M_DP_TA_1 5 - M_ST_NA_1 6 - M_ST_TA_1 7 - M_BO_NA_1 8 - M_BO_TA_1 9 - M_ME_NA_1 10 - M_ME_TA_1 11 - M_ME_NB_1 12 - M_ME_TB_1 13 - M_ME_NC_1 14 - M_ME_TC_1 15 - M_IT_NA_1 16 - M_IT_TA_1 17 - M_EP_TA_1 18 - M_EP_TC_1 19 - M_PS_NA_1 20 - M_ME_ND_1 21 - M_SP_TB_1 22 - M_DP_TB_1 23 - M_ST_TB_1 24 - M_BO_TB_1 25 - M_ME_TD_1 26 - M_ME_TE_1 27 - M_ME_TF_1 28 - M_IT_TB_1 29 - M_EP_TD_1

30 - M_EP_TE_1
31 - M_EP_TF_1
32 - C_SC_NA_1
33 - C_DC_NA_1
34 - C_RC_NA_1
35 - C_SE_NA_1
36 - C_SE_NB_1
37 - C_SE_NC_1
38 - C_BO_NA_1
39 - C_SC_TA_1
40 - C_DC_TA_1
41 - C_SE_TA_1
42 - C_SE_TB_1

Residence Point Server

Default Value Status Point – Single Point
Analog Point – Norm Value
Accumulator Point – Integ Totals

Access Lock View Only

Description Represents the type of object depending on whether the point type is Status Point, Accumulator Point or Analog Point.

This parameter is available in the Main tab of the point's configuration form in Quick Builder.

It is also available in the General tab of the point's display in the Station.

PVObjectAddress

Specific to IEC-870 Point

Type Long

Range For One Octet: 1 to 255
For Two Octet: 1 to 65535
For Three Octet: 1 to 16777215

Residence Point Server

Default Value	1
Access Lock	View Only
Description	Indicates the information object address for PV or the location from which to scan the PV. Depending on the number of octets, the information object contains the following values: 1 to 255 (note 0 is not used) if the size is 1 octet. 1 to 65535, if the size is 2 octets. 1 to 16777215, if the size is 3 octets. This parameter is available in the Main tab of the point's configuration form in Quick Builder. It is also available in the Scanning tab of the point's details display in the Station.

2.14 Q

Qualifier

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Short Pulse 1 – Long Pulse 2 – Persistent
Residence	Point Server
Default Value	0 – Short Pulse
Access Lock	View Only
Description	Qualifier represents the command sent from the IEC-870 host that a qualifier is needed. The qualifier is of 3 types: Short Pulse, Long Pulse and Persistent. Depending upon whatever is the value set here the same command is sent to the other end. This parameter is available in the Control tab. It is applicable only when the control type is Only Control or Only Input.

2.15 R

ReadChannelStatistics101

Specific to	IEC-870 Channel
Type	Enumeration
Range	0 - Reset Link Frames Sent 1 - Confirmed Data Frames Sent 2 - Unconfirmed Data Frames Sent 3 - Request Status Link Frames Sent 4 - Confirm Ack Frames Sent 5 - Confirm Nack Frames Sent 6 - Single Char Acks Sent 7 - Respond Status Link Frames Sent 8 - Frames Sent Failed 9 - Transmit Retries Sent 10 - Total Bytes Sent 11 - Frames Sent 12 - Times DFC Bit was set in TX sec 13 - Reset Link Frames Rcvd 14 - Confirmed Data Frames Rcvd 15 - Unconfirmed Data Frames Rcvd 16 - Request Status Link Frames Rcvd 17 - Reset Process Frames Rcvd 18 - Test Function Of Link Frames Rcvd 19 - Confirm Ack Frames Rcvd 20 - Confirm Nack Frames Rcvd 21 - Single Char Acks Rcvd 22 - Respond Status Link Frames Rcvd 23 - Single Char Nacks Rcvd 24 - Total Bytes Rcvd Including Overhead 25 - Frames Rcvd 26 - Times DFC Bit was set in Rx sec 27 - Invalid Starting Chars

28 - Invalid Length Errors
29 - Invalid Function Code Errors
30 - Invalid Address Detected
31 - Invalid Checksum Errors
32 - Invalid End Chars
33 - Invalid FCV Bit in the Ctrl Octet
34 - Invalid FCB Bit in the Ctrl Octet
35 - Serial IO Errors
36 - Unsupported Single Char Acks Rcvd
37 - Frame Timeouts
38 - Confirm Timeouts
39 - Frames Rejected No Buffers were Available
40 - TX Expirations
41 - Guaranteed Time Request Expirations
42 - TX IO Errors
43 - Outgoing Connections Failed
44 - Reconnect Retries
45 - Reset All Statistics
46 - Reset All TX
47 - Reset All RX
48 - Reset All Error

Residence	Point Server
Default Value	0 - Reset Link Frames Sent
Access Lock	Modifiable
Description	This parameter is used to read the statistics explicitly. This parameter is available in the Statistics tab of the channel.

ReadChannelStatistics104

Specific to	IEC-870 Channel
Type	Enumeration

Range	0 – I Frames Sent 1 – U Frames Sent 2 - S Frames Sent 3 – T1 Expired 4 – T2 Expired 5 – T3 Expired 6 – Text Message Was Sent 7 – Start DT Was Sent 8 – I Frames Rcvd 9 – U Frames Rcvd 10 – S Frames Rcvd 11 – Test Message Was Rcvd 12 – Stop DT Was Rcvd 13 – Invalid Frames Dropped Of Link Layer Problems 14 – Invalid Frames Dropped Of Application Layer Problems 15 – Reset All Statistics 16 – Reset All TX 17 – Reset All RX 18 – Reset All Error
Residence	Point Server
Default Value	0 – I Frames Sent
Access Lock	Modifiable
Description	This parameter is used to read the statistics explicitly. This parameter is available in the Statistics tab of the channel.

ReadControllerStatistics101

Specific to	IEC RTU 870 Controller
Type	Enumeration
Range	0 - Reset Link Frames Sent 1 - Confirmed Data Frames Sent 2 - Unconfirmed Data Frames Sent

3 - Request Status Link Frames Sent
4 - Confirm Ack Frames Sent
5 - Confirm Nack Frames Sent
6 - Single Char Acks Sent
7 - Respond Status Link Frames Sent
8 - Frames Sent Failed
9 - Transmit Retries Sent
10 - Total Bytes Sent
11 - Frames Sent
12 - Times DFC Bit was set in TX sec
13 - Reset Link Frames Rcvd
14 - Confirmed Data Frames Rcvd
15 - Unconfirmed Data Frames Rcvd
16 - Request Status Link Frames Rcvd
17 - Reset Process Frames Rcvd
18 - Test Function Of Link Frames Rcvd
19 - Confirm Ack Frames Rcvd
20 - Confirm Nack Frames Rcvd
21 - Single Char Acks Rcvd
22 - Respond Status Link Frames Rcvd
23 - Single Char Nacks Rcvd
24 - Total Bytes Rcvd Including Overhead
25 - Frames Rcvd
26 - Times DFC Bit was set in Rx sec
27 - Invalid Starting Chars
28 - Invalid Length Errors
29 - Invalid Function Code Errors
30 - Invalid Address Detected
31 - Invalid Checksum Errors
32 - Invalid End Chars
33 - Invalid FCV Bit in the Ctrl Octet
34 - Invalid FCB Bit in the Ctrl Octet
35 - Serial IO Errors

36 - Unsupported Single Char Acks Rcvd
37 - Frame Timeouts
38 - Confirm Timeouts
39 - Frames Rejected No Buffers were Available
40 - TX Expirations
41 - Guaranteed Time Request Expirations
42 - TX IO Errors
43 - Outgoing Connections Failed
44 - Reconnect Retries
45 - Reset All Statistics
46 - Reset All TX
47 - Reset All RX
48 - Reset All Error

Residence	Point Server
Default Value	0 - Reset Link Frames Sent
Access Lock	Modifiable
Description	This parameter is used to read the statistics explicitly. This parameter is available in the Statistics tab of the controller.

ReadControllerStatistics104

Specific to	IEC RTU 870 Controller
Type	Enumeration

Range	0 – I Frames Sent 1 – U Frames Sent 2 - S Frames Sent 3 – T1 Expired 4 – T2 Expired 5 – T3 Expired 6 – Text Message Was Sent 7 – Start DT Was Sent 8 – I Frames Rcvd 9 – U Frames Rcvd 10 – S Frames Rcvd 11 – Test Message Was Rcvd 12 – Stop DT Was Rcvd 13 – Invalid Frames Dropped Of Link Layer Problems 14 – Invalid Frames Dropped Of Application Layer Problems 15 – Reset All Statistics 16 – Reset All TX 17 – Reset All RX 18 – Reset All Error
Residence	Point Server
Default Value	0 – I Frames Sent
Access Lock	Modifiable
Description	This parameter is used to read the statistics explicitly. This parameter is available in the Statistics tab of the controller.

RespondStatusOfLinkFramesReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long Integer
Range	0 – 2147483647

Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of the respond status of link frames received. This parameter is available in the Statistics tab of the controller and channel.

RespondStatusOfLinkFramesReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the RespondStatusOfLinkFramesReceived parameter, the check box corresponding to the RespondStatusOfLinkFramesReceivedOverflow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display for the controller and channel. This parameter is available in the Statistics tab of the controller and channel.

ReconnectRetries

Specific to	IEC-870 RTU Channel and Controller – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0

Access Lock	Modifiable
Description	This parameter keeps a count of the number of reconnection retries that have occurred. It is available in the Controller and Channel's station displays in the Statistics tab.

ReconnectRetriesOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the ReconnectRetries parameter, the check box corresponding to the ReconnectRetriesOverFlow parameter is selected. To reset the parameter, click the Reset button corresponding to the parameter. It is available in the Controller and Channel's station displays in the Statistics tab.

RedundantBaudRate

Specific to	IEC-870 RTU Channel
Type	Enumeration

Range	0 - 300 1 - 600 2 - 1200 3 - 1800 4 - 2400 5 - 4800 6 - 9600 7 - 19200 8 - 38400.
Residence	Point Server
Default Value	6 - 9600
Access Lock	View Only
Description	Redundant Baud Rate Indicates the data transmission rate (bits/second), in case of a redundant configuration. This parameter is available in the Redundant Port tab, in the channel's configuration form, in Quick Builder. It is available only if the Port Type selected is Serial. It is also available in the Statistics tab of the Controller and Channel's Station displays.

RedundantChecksum

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – NONE 1 – ONESCOMP 2 – TWOSCOMP 3 – XOR 4 – CRC16_0 5 – CRC16_1
Residence	Point Server
Default Value	0 – NONE

Access Lock	View Only
Description	Checksum represents the type of checksum error detection used for the port. Redundant Checksum is used in case of a redundant configuration. This parameter is available in the Redundant Port tab, of the Channel's configuration form in Quick Builder. It stores the checksum value for a Serial port type.

RedundantTerminalChecksum

Specific to	IEC-870 RTU Controller, Channel
Type	Enumeration
Range	0 – NONE 1 – ONESCOMP 2 – TWOSCOMP 3 – XOR 4 – CRC16_0 5 – CRC16_1
Residence	Point Server
Default Value	0 – NONE
Access Lock	View Only
Description	Checksum represents the type of checksum error detection used for the port. Redundant Checksum is used in case of a redundant configuration. This parameter is available in the Redundant Port tab, in the controller and channel's configuration form, in Quick Builder, when the port type is Terminal Server.

RedundantDetectDCD

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected

Residence	Experion, Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	View Only
Description	Redundant Detect DCD is used in a redundant configuration. This parameter enables monitoring of the Data Carrier Detect communication status of the COM port requires monitoring (usually when using modem or microwave linking). When selected, the communications fails if the desired COM status line is not high — for example, on a dial-up link connection for a modem. This parameter is available in the Redundant Port tab of the channel's configuration form, in Quick Builder, when the selected port type is Serial.

RedundantDetectDSR

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	View Only
Description	Detect DSR enables you to monitor Data Set Ready communication status line of the COM port (usually when using modem or microwave linking). When selected, the communications fails if the desired COM status is not achieved. Redundant Detect DSR parameter performs the same function in a redundant configuration. This parameter is available in the Redundant Port tab of the channel's configuration form, in Quick Builder, when the selected port type is Serial.

RedundantEnableRTSCTSFlowControl

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	View Only
Description	Enable RTS/CTS Flow Control stops a receiver from being overrun with messages from a sender by using RTS/CTS flow control. Redundant Enable RTS/CTS Flow Control parameter performs the same function in a redundant configuration. This parameter is available in the Redundant Port tab, in the channel's configuration form, in Quick Builder, when the port type is Serial.

RedundantEcho

Specific to	IEC-870 RTU Controller
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Experion, Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	View Only
Description	Echo (Required for Stallion RS-485 ports) represents that the server expects the messages it sends to the port on the transmit line to be echoed back on the receive line. Enable this parameter for a Stallion EasyConnection adapter or a Black Box converter. Redundant Echo parameter performs the same function in a redundant configuration. This parameter is available in the Redundant Port tab, in the channel's configuration form in Quick Builder, when the port type is Serial.

RedundantEnableStallionRS485HalfDuplex

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	View Only

Description	Enable Stallion RS485 Half Duplex enables you to communicate from RS-232 to RS-485 using a Stallion EasyConnection adapter. Redundant Enable Stallion RS 485 Half Duplex parameter performs the same function in a redundant configuration. This parameter is available in the Redundant Port tab, in the channel's configuration form in Quick Builder, when the port type is Serial.

RedundantIdleTimeout

Specific to	IEC-870 RTU Channel
Type	Integer
Range	0 to 3600
Residence	Point Server
Default Value	180 seconds
Access Lock	View Only
Description	Idle Timeout represents the time (in seconds) that the channel waits for a successful connection to the server before closing the connection. A value of 0 indicates that the connection is never closed. Set idle timeout to a number greater than the fastest polling period on the channel. This also applies to the idle timeout configured in the terminal server. RedundantIdleTimeout parameter performs the same function in a redundant configuration. This parameter is available in the Redundant Port tab, in the channel's configuration form, when the port type is Terminal Server.

RedundantNumberofdatabits

Specific to	IEC-870 RTU Channel
Type	Integer
Range	8
Residence	Point Server
Default Value	8
Access Lock	View Only
Description	Number of Data Bits indicates the number of data bits used for transmission. In a redundant configuration, this parameter is available in the Redundant Port tab of a channel's configuration form in Quick Builder. It is available, only if the selected port type is Serial.

RedundantParity

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Even 1 – Odd 2 – None
Residence	Point Server
Default Value	0 – Even
Access Lock	View Only
Description	Parity indicates the parity verification used on the port. This parameter is used for parity verification in case a redundant configuration. This parameter is available in the Redundant Port tab of a channel's configuration form in Quick Builder. It is available, only if the selected port type is Serial.

RedundantPortType

Specific to	IEC-870 RTU Channel.
Type	Enumeration
Range	0 – Serial 1 – Terminal Server 2 – Ethernet 3 – None
Residence	Point Server
Default Value	0 – Serial
Access Lock	View Only
Description	Port Type can be Serial, Terminal Server or Ethernet. Redundant Port Type identifies the Port Type in case of a redundant configuration. This parameter is available in the Redundant Port tab of the channel's configuration form in Quick Builder.

RedundantSerialPortName

Specific to	IEC-870 RTU Channel
Type	Integer
Range	1-256
Residence	Point Server
Default Value	1 – COM1
Access Lock	View Only
Description	Redundant Serial Port Name Identifies the name of the serial port, in case of a redundant configuration. This parameter is available in the Redundant Port tab of the channel's configuration form in Quick Builder, if the selected Port Type is Serial.

RedundantStopbits

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	1 - One 2 - Two
Residence	Point Server
Default Value	1 - One
Access Lock	View Only
Description	Stop Bits indicates the number of stop bits used for transmission. Redundant Stop Bits indicates the stop bits used for a redundant configuration. The default is 1. This parameter is available in the Redundant Port tab, if the port type is Serial.

RedundantTerminalServerTCPHostName

Specific to	IEC-870 RTU Channel
Type	Character
Range	1 – 34
Residence	Point Server
Default Value	NULL
Access Lock	View Only
Description	Terminal Server TCP Host Name represents the name and port number of the terminal server to which the channel is connected. This parameter is available in the Redundant Port tab, in the channel's configuration form in Quick Builder, when the port type is Terminal Server.

RedundantTerminalServerTCPPortNo

Specific to	IEC-870 RTU Channel
Type	Integer

Range	0 to 10000
Residence	Experion, Point Server
Default Value	0
Access Lock	View Only
Description	Terminal Server TCP Port No represents a TCP host name or an IP address, but it must match the TCP host name used when you installed and internally configured the terminal server. Enter the correct TCP host name/IP address in Terminal Server TCP Port No. The default value for this parameter is 0. The range for this parameter is 0 to 10000. RedundantTerminalServerTCPPortNumber parameter performs the same function in a redundant configuration. This parameter is available in the Redundant Port tab, in the channel's configuration form, in Quick Builder, when the port type is Terminal Server.

RedundantXONXOFF

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – None 1 – Input 2 – Output
Residence	Point Server
Default Value	0 – None
Access Lock	View Only

Description	Redundant XON/XOFF indicates the type of XON/XOFF software flow control used to stop a receiver from being overrun with messages from a sender, in a redundant configuration. The types are: • None (default) • Input (use XON/XOFF to control the flow of data on the receive line) • Output (use XON/XOFF to control the flow of data on the transmit line) This parameter is available in the Redundant Port tab, in the channel's configuration form, in Quick Builder, when the port type is Serial.

ResetChannelStatistics104

Specific to	IEC RTU 870 Channel
Type	Enumeration

Range	0 – I Frames Sent 1 – U Frames Sent 2 - S Frames Sent 3 – T1 Expired 4 – T2 Expired 5 – T3 Expired 6 – Text Message Was Sent 7 – Start DT Was Sent 8 – I Frames Rcvd 9 – U Frames Rcvd 10 – S Frames Rcvd 11 – Test Message Was Rcvd 12 – Stop DT Was Rcvd 13 – Invalid Frames Dropped Of Link Layer Problems 14 – Invalid Frames Dropped Of Application Layer Problems 15 – Reset All Statistics 16 – Reset All TX 17 – Reset All RX 18 – Reset All Error
Residence	Point Server
Default Value	0 – I Frames Sent
Access Lock	Modifiable
Description	This parameter is used to reset the different channel statistics parameters from the channel display in the Station. If one parameter's check box is selected, the selected parameter is reset. If more than one parameters' checkboxes are selected, the selected parameters are reset. If all the parameters' checkboxes are selected, all the parameters are reset. This parameter is available in the Statistics tab of the controller and channel displays in the Station.

ResetControllerStatistics104

Specific to	IEC RTU 870 Controller
Type	Enumeration
Range	0 – I Frames Sent 1 – U Frames Sent 2 – S Frames Sent 3 – T1 Expired 4 – T2 Expired 5 – T3 Expired 6 – Test Message Was Sent 7 – Start DT Was Sent 8 – I Frames Rcvd 9 – U Frames Rcvd 10 – S Frames Rcvd 11 – Test Message Was Rcvd 12 – Stop DT Was Rcvd 13 – Invalid Frames Dropped Of Link Layer Problems 14 – Invalid Frames Dropped Of Application Layer Problems 15 – Reset All Statistics 16 – Reset All TX 17 – Reset All RX 18 – Reset All Error
Residence	Point Server
Default Value	0 – I Frames Sent
Access Lock	Modifiable

Description	This parameter is used to reset the different controller statistics parameters from the controller display in the Station. If one parameter's check box is selected, the selected parameter is reset. If more than one parameters' checkboxes are selected, the selected parameters are reset. If all the parameters' checkboxes are selected, all the parameters are reset. This parameter is available in the Statistics tab of the controller and channel displays in the Station.

ResetProcessFramesReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the number of reset process frames received. This parameter is available in the Statistics tab of the Channel and Controller displays in the Station.

ResetProcessFramesReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable

Description

If there is an overflow in the value of the ResetProcessFramesReceived parameter, the check box corresponding to the ResetProcessFramesReceivedOverFlow parameter is selected.

To reset the value, click the Reset button corresponding to this parameter in the Station display.

This parameter is located in the Statistics tab of the channel and controller's station displays.

ResetChannelStatistics101

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 - Reset Link Frames Sent 1 - Confirmed Data Frames Sent 2 - Unconfirmed Data Frames Sent 3 - Request Status Link Frames Sent 4 - Confirm Ack Frames Sent 5 - Confirm Nack Frames Sent 6 - Single Char Acks Sent 7 - Respond Status Link Frames Sent 8 - Frames Sent Failed 9 - Transmit Retries Sent 10 - Total Bytes Sent 11 - Frames Sent 12 - Times DFC Bit was set in TX sec 13 - Reset Link Frames Rcvd 14 - Confirmed Data Frames Rcvd 15 - Unconfirmed Data Frames Rcvd 16 - Request Status Link Frames Rcvd 17 - Reset Process Frames Rcvd 18 - Test Function Of Link Frames Rcvd 19 - Confirm Ack Frames Rcvd 20 - Confirm Nack Frames Rcvd 21 - Single Char Acks Rcvd 22 - Respond Status Link Frames Rcvd 23 - Single Char Nacks Rcvd 24 - Total Bytes Rcvd Including Overhead 25 - Frames Rcvd 26 - Times DFC Bit was set in Rx sec 27 - Invalid Starting Chars 28 - Invalid Length Errors

29 - Invalid Function Code Errors
30 - Invalid Address Detected
31 - Invalid Checksum Errors
32 - Invalid End Chars
33 - Invalid FCV Bit in the Ctrl Octet
34 - Invalid FCB Bit in the Ctrl Octet
35 - Serial IO Errors
36 - Unsupported Single Char Acks Rcvd
37 - Frame Timeouts
38 - Confirm Timeouts
39 - Frames Rejected No Buffers were Available
40 - TX Expirations
41 - Guaranteed Time Request Expirations
42 - TX IO Errors
43 - Outgoing Connections Failed
44 - Reconnect Retries
45 - Reset All Statistics
46 - Reset All TX
47 - Reset All RX
48 - Reset All Error

Residence Point Server

Default Value 0 - Reset Link Frames Sent

Access Lock Modifiable

Description This parameter is used to reset the different channel statistics parameters from the channel display in the Station. If one parameter's check box is selected, the selected parameter is reset.

If more than one parameters' checkboxes are selected, the selected parameters are reset. If all the parameters' checkboxes are selected, all the parameters are reset.

This parameter is available in the Statistics tab of the controller and channel displays in the Station.

ResetControllerStatistics101

Specific to	IEC-870 RTU Controller – Statistics
Type	Enumeration
Range	0 - Reset Link Frames Sent 1 - Confirmed Data Frames Sent 2 - Unconfirmed Data Frames Sent 3 - Request Status Link Frames Sent 4 - Confirm Ack Frames Sent 5 - Confirm Nack Frames Sent 6 - Single Char Acks Sent 7 - Respond Status Link Frames Sent 8 - Frames Sent Failed 9 - Transmit Retries Sent 10 - Total Bytes Sent 11 - Frames Sent 12 - Times DFC Bit was set in TX sec 13 - Reset Link Frames Rcvd 14 - Confirmed Data Frames Rcvd 15 - Unconfirmed Data Frames Rcvd 16 - Request Status Link Frames Rcvd 17 - Reset Process Frames Rcvd 18 - Test Function Of Link Frames Rcvd 19 - Confirm Ack Frames Rcvd 20 - Confirm Nack Frames Rcvd 21 - Single Char Acks Rcvd 22 - Respond Status Link Frames Rcvd 23 - Single Char Nacks Rcvd 24 - Total Bytes Rcvd Including Overhead 25 - Frames Rcvd 26 - Times DFC Bit was set in Rx sec 27 - Invalid Starting Chars 28 - Invalid Length Errors

29 - Invalid Function Code Errors
30 - Invalid Address Detected
31 - Invalid Checksum Errors
32 - Invalid End Chars
33 - Invalid FCV Bit in the Ctrl Octet
34 - Invalid FCB Bit in the Ctrl Octet
35 - Serial IO Errors
36 - Unsupported Single Char Acks Rcvd
37 - Frame Timeouts
38 - Confirm Timeouts
39 - Frames Rejected No Buffers were Available
40 - TX Expirations
41 - Guaranteed Time Request Expirations
42 - TX IO Errors
43 - Outgoing Connections Failed
44 - Reconnect Retries
45 - Reset All Statistics
46 - Reset All TX
47 - Reset All RX
48 - Reset All Error

Residence Point Server

Default Value 0 - Reset Link Frames Sent

Access Lock Modifiable

Description This parameter is used to reset the different controller statistics parameters from the controller display in the Station. If one parameter's check box is selected, the selected parameter is reset. If more than one parameters' checkboxes are selected, the selected parameters are reset. If all the parameters' checkboxes are selected, all the parameters are reset.

This parameter is available in the Statistics tab of the channel and controller displays in the Station.

ResetLinkFramesReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	Indicates the number of reset link frames received. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

ResetLinkFramesReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	If there is an overflow in the value of the ResetLinkFramesReceived parameter, the check box corresponding to the ResetLinkFramesReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

ResetLinkFramesSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the number of reset link frames sent successfully. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

ResetLinkFramesSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the ResetLinkFramesSent parameter, the check box corresponding to the ResetLinkFramesSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

Retries

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 5
Residence	Point Server
Default Value	1
Access Lock	View Only
Description	Retries represents the number of retries that the server has per message per RTU. The range is 0 to 5. The default value is 1. This parameter is available in the Protocol tab in the controller's configuration form, in Quick Builder.

RespondStatusOfLinkFramesSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of respond status of link frames sent. This parameter is available in the Statistics tab in the channel and controller station displays.

RespondStatusOfLinkFramesSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of RespondStatusOfLinkFramesSent parameter, the check box corresponding to the RespondStatusOfLinkFramesOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

RequestStatusOfLinkFramesReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of request status of link frames received. This parameter is available in the Statistics tab of the controller and channel displays in the Station.

RequestStatusOfLinkFramesReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of RequestStatusOfLinkFramesReceived parameter, the check box corresponding to the RequestStatusOfLinkFramesReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the controller and channel displays in the Station.

RequestStatusOfLinkFramesSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the number of Request – Status Link Frames successfully sent. This parameter is available in the Statistics tab of the controller and channel's station display.

RequestStatusOfLinkFramesSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of RequestStatusOfLinkFramesSent parameter, the check box corresponding to the RequestStatusOfLinkFramesSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the controller and channel displays in the Station.

RTUsconnected

Specific to	IEC RTU 870 Channel
Type	Integer
Range	0 – 255
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of the number of RTUs connected to the channel. This parameter is available in the Statistics tab of the controller and channel displays in the Station.

RTUsconnectedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the RTUsConnected parameter, the check box corresponding to the RTUsConnectedOverflow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the controller and channel displays in the Station.

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ScanFrequencyForClass2

Specific to	IEC-870 RTU Controller
Type	Integer
Range	1 – 3600
Residence	Point Server
Default Value	10
Access Lock	View Only
Description	Represents the scan frequency to be used for polling class 2 data. This parameter is available in the Timers tab of the controller's configuration form in Quick Builder, when the protocol type is 60870-5-101.

SelectBeforeExecute

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	View Only

Description	Represents the type of command that is sent. There are two kinds of commands in the 60870. The command can either be “Direct” command or “Select Before Execute.” Enabling this parameter implements the procedure whenever the point is commanded. Disabling this parameter implements the procedure whenever the point is commanded. This parameter is available in the Control tab of the point’s configuration form in Quick Builder.

SendAPDUTImeoutT1

Specific to	IEC-870 RTU Controller
Type	Integer
Range	1 – 3600
Residence	Point Server
Default Value	15
Access Lock	View Only
Description	This parameter is available in the Timers tab of the controller’s configuration form in Quick Builder, when the protocol type is 60870-5-101.

SequenceNumber

Specific to	60870-5-104 Protocol
Type	Integer
Range	0 – 255
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	The Send and Receive sequence numbers are used to identify the sequence in which APDUs are sent and received. This helps in identifying loss and duplication of APDUs.

StructuredUnstructured

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	0 – Structured 1 – Unstructured
Residence	Point Server
Default Value	1 – Unstructured
Access Lock	View Only
Description	Structured/Unstructured indicates whether the link address is structured or unstructured. The current release supports only Unstructured. This parameter is available in the Protocol Parameters tab of the channel's configuration form in Quick Builder, when the port type is Serial or Terminal Server. This parameter is also available in the Protocol Parameters tab of the channel display in the Station, when the protocol type is 60870-5-101.

Stopbits

Specific to	IEC-870 RTU Channel
Type	Enumeration
Range	1 – One 2 – Two
Residence	Point Server
Default Value	1 – One
Access Lock	View Only

Description	Stop Bits indicates the number of stop bits used for transmission. The default is 1. This parameter is available in the Port tab of Channel configuration form in Quick Builder. It's also available on the Station display for the Channel.

ScaleFactor

Specific to	IEC-870 Point
Type	Real
Range	1 – 10
Residence	Point Server
Default Value	1
Access Lock	Modifiable
Description	Scale Factor represents the value used to convert the counts to engineering units. The default, 1, means that a one-to-one ratio exists between the counts and the engineering units. A value of 10 would mean that one count equals 10 engineering units. This parameter is available in the Detail tab of the point's configuration form in Quick Builder, when the point is an Accumulator point. It is also available in the General tab of the Point detail display in the Station, for an Accumulator point.

ScanningInhibit

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	1 – Disabled or Not Selected

Access Lock	Modifiable
Description	This parameter is available only in the Point Detail Display. Once set, the Point Server value is set via the display and the value from PVRAW is taken from the protocol stack.

SerialPortName

Specific to	IEC-870 RTU Channel
Type	Integer
Range	1 - 256
Residence	Point Server
Default Value	1 – COM1
Access Lock	View Only
Description	Identifies the name of the serial port. This parameter is available in the Port tab of the channel's configuration form in Quick Builder.

SerialIOErrors

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the number of Serial I/O errors. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

SerialIOErrorsOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value SerialIOErrors parameter, the check box corresponding to the SerialIOErrorsOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

SingleCharacterACKsSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647

Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This parameter stores the value of the number of Single Character ACKs sent. It is available in the Statistics tab of the channel and controller displays in the Station.

SingleCharacterACKsSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of SingleCharacterACKsSent parameter, the check box corresponding to the SingleCharacterACKsSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. It is available in the Statistics tab of the channel and controller displays in the Station.

SingleCharacterAcksReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0

Access Lock	Modifiable
Description	This parameter stores the value of single character acknowledgements received. It is available in the Statistics tab of the channel and controller displays in the Station.

SingleCharacterAcksReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of SingleCharacterAcksReceived parameter, the check box corresponding to the SingleCharacterAcksReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. It is available in the Statistics tab of the channel and controller displays in the Station.

SingleCharacterNacksReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This parameter stores the value of Single Character NACKS received. It is displayed in the Statistics tab of the controller and channel displays.

SingleCharacterNacksReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the SingleCharacterNacksReceived parameter, the check box corresponding to the SingleCharacterNacksReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. It is displayed in the Statistics tab of the controller and channel displays.

StateDescriptor0

Specific to	IEC-870 Point
Type	0 to 8 spaceless characters
Range	Characters
Residence	Point Server
Default Value	NULL
Access Lock	View Only
Description	If the point type is Status Point (Digital Point), the Details tab for the point (in Quick Builder) displays State Descriptors (0 to 4). A state descriptor describes the associated state, and can have a maximum of eight characters (no spaces allowed). For example, you might make "Open" the state descriptor for state 1 and "Closed" for state 0. For a control (output) point, there must be a unique state descriptor for each valid state. This is also recommended for a monitor (input) point. This parameter is available in the Detail tab of the point's configuration form in Quick Builder, only when the point type is Status Point. It is also available in the Alarms tab of the point detail display for a Status point.

StateDescriptor1

Specific to	IEC-870 Point
Type	0 to 8 spaceless text
Range	Characters
Residence	Point Server
Default Value	NULL
Access Lock	View Only

Description	If the point type is Status Point (Digital Point), the Details tab for the point (in Quick Builder) displays State Descriptors (0 to 4). A state descriptor describes the associated state, and can have a maximum of eight characters (no spaces allowed). For example, you might make "Open" the state descriptor for state 1 and "Closed" for state 0. For a control (output) point, there must be a unique state descriptor for each valid state. This is also recommended for a monitor (input) point. This parameter is available in the Detail tab of the point's configuration form in Quick Builder, only when the point type is Status Point. It is also available in the Alarms tab of the point detail display for a Status point.

StateDescriptor2

Specific to	IEC-870 Point
Type	0 to 8 spaceless characters
Range	Characters
Residence	Point Server
Default Value	NULL
Access Lock	View Only
Description	If the point type is Status Point (Digital Point), the Details tab for the point (in Quick Builder) displays State Descriptors (0 to 4). A state descriptor describes the associated state, and can have a maximum of eight characters (no spaces allowed). For example, you might make "Open" the state descriptor for state 1 and "Closed" for state 0. For a control (output) point, there must be a unique state descriptor for each valid state. This is also recommended for a monitor (input) point. This parameter is available in the Detail tab of the point's configuration form in Quick Builder, only when the point type is Status Point. It is also available in the Alarms tab of the point detail display for a Status point.

StateDescriptor3

Specific to	IEC-870 Point
Type	0 to 8 spaceless text
Range	Characters
Residence	Point Server
Default Value	NULL
Access Lock	View Only
Description	If the point type is Status Point (Digital Point), the Details tab for the point (in Quick Builder) displays State Descriptors (0 to 4). A state descriptor describes the associated state, and can have a maximum of eight characters (no spaces allowed). For example, you might make "Open" the state descriptor for state 1 and "Closed" for state 0. For a control (output) point, there must be a unique state descriptor for each valid state. This is also recommended for a monitor (input) point. This parameter is available in the Detail tab of the point's configuration form in Quick Builder, only when the point type is Status Point. It is also available in the Alarms tab of the point detail display for a Status point.

StatusCommands

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Read
Residence	Point Server
Default Value	0 – Read
Access Lock	Modifiable
Description	Used to execute the Status Point's Read command from the Station. This parameter is available in the Command tab of the point's display.

StatusControlFailPriority

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable
Description	Indicates the priority for a Control Fail Alarm ,for a status point. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. It is also available in the Alarms tab of the point detail display in the Station.

StatusEnableControlFailAlarm

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable

Description	This parameter is used to enable the Control Fail Alarm for a status point. It is available in the Alarms tab of the point's configuration form in Quick Builder, only when the control type is Control and Input or Only Control. It is also available in the Alarms tab of the point detail display, when the control type is Control and Input or Only Control.

StatusEnableModeChangeAlarm

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable
Description	This parameter is used to enable the Mode Change Alarm for a status point. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Alarms tab of the point detail display, when the control type is Control and Input or Only Control.

StatusEnableState0Alarm

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	1 – Enabled or Selected

Access Lock	Modifiable
Description	Applicable to a status point. Available in the Alarms tab for the point in Quick Builder. Used for enabling the State 0 Alarm when the PointState changes to the specified state. When the point is single point, there are only two states. Hence, only two states (State 0 Alarm and State 1 Alarm) are available. When the point is a double point, there are four states. Hence, all the four states are available. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is disabled, if the control type is Only Input or Control and Input. It is also available in the Alarms tab of the point detail display, when the control type is Only Input or Control and Input.

StatusEnableState1Alarm

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	1 – Enabled or Selected
Access Lock	Modifiable

Description	Applicable to a status point. Available in the Alarms tab for the point in Quick Builder. Used for enabling the State 1 Alarm when the PointState changes to the specified state. When the point is single point, there are only two states. Hence, only two states (State 0 Alarm and State 1 Alarm) are available. When the point is a double point, there are four states. Hence, all the four states are available. This parameter is available in the Alarms tab of the point's configuration form, in Quick Builder. It is disabled, if the control type is Only Input or Control and Input. It is also available in the Alarms tab of the point detail display, when the control type is Only Input or Control and Input.

StatusEnableState2Alarm

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable
Description	Applicable for a status point. Available in the Alarms tab for the point in Quick Builder. Used for enabling the State 0 Alarm when the PointState changes to the specified state. When the point is a single point, there are only two states. Hence, only two states (State 0 Alarm and State 1 Alarm) are available. When the point is a double point, there are four states (State 0, State 1, State 2, State 3). Hence, all the four states are available. This parameter is available in the Alarms tab of the point's

configuration form in Quick Builder. It is enabled, only when the Object Type is of type Double Point and when the control type is Only Input or Control and Input.

Moreover, it is available in the Alarms tab of the point detail display, only when the control type is Only Input or Control and Input.

StatusEnableState3Alarm

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable
Description	Applicable for a status point. Available in the Alarms tab for the point in Quick Builder. Used to enable the State 3 Alarm when the PointState changes to the specified state. When the point is single point, there are only two states. Hence, only two states (State 0 Alarm and State 1 Alarm) are available. When the point is a double point, there are four states. Hence, all the four states are available. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is enabled, only when the Object Type is of type Double Point. Moreover, it is available in the Alarms tab of the point detail display, only when the control type is Only Input or Control and Input.

SFramesSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647

Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of SFrames sent. This parameter is available in the Statistics tab of the channel and controller's displays in the Station.

SFramesSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of SFramesSent parameter, the check box corresponding to the SFramesSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display.

SFramesWasReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of SFrames received. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

SFramesWasReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the SFramesWasReceived parameter, the check box corresponding to the SFramesWasReceivedOverflow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

StatusModeChangePriority

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable

Description	Indicates the priority for the Mode Change Alarm, for a status point. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Alarms tab of the point detail display in the Station.

StatusState0Priority

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable
Description	For a State 0 alarm, this specifies the alarm's severity, and where it appears in the list of alarms, for a status point. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Alarms tab of the point detail display in the Station.

StatusState1Priority

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable
Description	For a State 1 alarm, this specifies the alarm's severity, and where it appears in the list of alarms, for a status point. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Alarms tab of the point detail display in the Station.

StatusState2Priority

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal
Access Lock	Modifiable
Description	For a State 2 alarm, this specifies the alarm's severity, and where it appears in the list of alarms, for a status point. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Alarms tab of the point detail display in the Station.

StatusState3Priority

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Journal 1 – Low 2 – High 3 – Urgent
Residence	Point Server
Default Value	0 – Journal

Access Lock	Modifiable
Description	For a State 3 alarm, this specifies the alarm's severity, and where it appears in the list of alarms, for a status point. Priority can be: Urgent, High, Low and Journal (the default). All alarms, except for Journal, appear in the Alarm Summary display. Journal alarms do not appear in Station as alarms, but are written to the event file. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Alarms tab of the point detail display in the Station.

StatusState0SubPriority

Specific to	IEC-870 Point
Type	Integer
Range	0 – 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Alarms tab of the point detail display in the Station.

StatusState1SubPriority

Specific to	IEC-870 Point
Type	Integer
Range	0 – 15
Residence	Point Server

Default Value	0
Access Lock	Modifiable
Description	Specifies the alarm's severity, and where it appears in the list of alarms, for a status point. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is also available in the Alarms tab of the point detail display in the Station.

StatusState2SubPriority

Specific to	IEC-870 Point
Type	Integer
Range	0 – 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Specifies the alarm's severity, and where it appears in the list of alarms, for a status point. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form in Quick Builder.

StatusState3SubPriority

Specific to	IEC-870 Point
Type	Integer
Range	0 – 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable

Description	Specifies the alarm's severity, and where it appears in the list of alarms, for a status point. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter is available in the Alarms tab of the point's configuration form in Quick Builder.

StatusControlFailSubPriority

Specific to	IEC-870 Point
Type	Integer
Range	0 – 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Specifies the alarm's severity, and where it appears in the list of alarms, for a status point. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter specifies the Sub Priority for the Control Fail Alarm. It is available in the Alarms tab of the point's configuration form in Quick Builder. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder.

StatusEnableSOE

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Not Selected 1 – Selected
Residence	Point Server
Default Value	0 – Not Selected
Access Lock	Modifiable

Description	Used only for status points and not used for analog and accumulator points. If this parameter is enabled (selected), it ensures that during download, it is only associated with time tag fields. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder. It is applicable, only if the Object Type is a Double Point TT or a Double Point TT+ and if the Control Type is Only Input or Control and Input. This parameter is available in the Alarms tab of the point's configuration form in Quick Builder.

StatusModeChangeSubPriority

Specific to	IEC-870 Point
Type	Integer
Range	0 – 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Specifies the alarm's severity, and where it appears in the list of alarms, for a status point. Sub-priority ranges from 15 (highest), to 0 (lowest and default). This parameter specifies the Sub Priority for the Control Fail Alarm. This parameter specifies the Sub Priority for the Mode Change alarm. It is available in the Alarms tab of the point's configuration form, in Quick Builder. It is also available in the Alarms tab of the point's configuration form in Quick Builder.

StatusRealarmOnStateTransition

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – Disabled or Not Selected 1 – Enabled or Selected
Residence	Point Server
Default Value	0 – Disabled or Not Selected
Access Lock	Modifiable
Description	Enables alarming on transition between alarm states for a status point.

StatusState1SubPriority

Specific to	IEC-870 Point
Type	Integer
Range	0 – 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default).

StatusState2SubPriority

Specific to	IEC-870 Point
Type	Integer
Range	0 – 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable

Description	Specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default).

StatusState3SubPriority

Specific to	IEC-870 Point
Type	Integer
Range	0 – 15
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Specifies the alarm's severity, and where it appears in the list of alarms. Sub-priority ranges from 15 (highest), to 0 (lowest and default).

StationInterrogationGlobal

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Used for the polling frequency to be used for the station interrogation for global group. This parameter is available in the Interrogation tab of the controller’s configuration form in Quick Builder. It corresponds to the Global parameter.

StationInterrogationGroup1

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 1. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 1 parameter.

StationInterrogationGroup2

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 2. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 2 parameter.

StationInterrogationGroup3

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 3. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 3 parameter.

StationInterrogationGroup4

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 - 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 4. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 4 parameter.

StationInterrogationGroup5

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 5. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 5 parameter.

StationInterrogationGroup6

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 6. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 6 parameter.

StationInterrogationGroup7

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 7. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 7 parameter.

StationInterrogationGroup8

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 8. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 8 parameter.

StationInterrogationGroup9

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 9. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 9 parameter.

StationInterrogationGroup10

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 10. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 10 parameter.

StationInterrogationGroup11

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 11. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 11 parameter.

StationInterrogationGroup12

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 12. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 12 parameter.

StationInterrogationGroup13

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 13. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 13 parameter.

StationInterrogationGroup14

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 14. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 14 parameter.

StationInterrogationGroup15

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 15. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 15 parameter.

StationInterrogationGroup16

Specific to	IEC-870 RTU Controller
Type	Integer
Range	0 – 3600
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Indicates the polling frequency to be used for the station interrogation for group 16. This parameter is available in the Interrogation tab of the controller's configuration form in Quick Builder. It corresponds to the group 15 parameter.

StartFileIOA

Specific to	IEC-870 RTU Controller
Type	LONG
Range	1 – 16777215

Residence	Point Server
Default Value	1
Access Lock	View only
Description	StartFileIOA is the Starting Information Object Address for File Transfer. The FileIOA parameter depends on **StartFileIOA** and **NoofFiles** parameter. This is used for defining the Information Object Address for FileTransfer.

2.17 T

TotalBytesSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of total bytes sent. This parameter is available in the Statistics tab of the Channel and Controller displays in the Station

TotalBytesSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the TotalBytesSent parameter, the check box corresponding to the TotalBytesSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the Channel and Controller displays in the Station.

TestFunctionOfLinkFramesReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the test function of link frames received. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TestFunctionOfLinkFramesReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of TestFunctionOfLinkFramesReceived parameter, the check box corresponding to the TestFunctionOfLinkFramesReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TerminalChecksum

Specific to	IEC-870 RTU Channel.
Type	Enumeration
Range	0 – NONE 1 – ONESCOMP 2 – TWOSCOMP 3 – XOR 4 – CRC16_0 5 – CRC16_1
Residence	Point Server
Default Value	0 – NONE
Access Lock	View Only
Description	Checksum represents the type of checksum error detection used for the port when the Port Type is Terminal Server. The default value is NONE. This parameter is available in the Port tab of the Channel's configuration form. In a redundant configuration, it is also available in the Redundant Port tab.

TerminalServerTCPHostName

Specific to	IEC-870 RTU Channel
Type	CHAR
Range	0 – 34 Characters
Residence	Point Server
Default Value	NULL
Access Lock	View Only

Description	Terminal Server TCP Host Name represents the name and port number of the terminal server to which the channel is connected. It is available in the Port tab of the Channel's configuration form in Quick Builder. In a redundant configuration, this parameter is also available in the Redundant Port tab.

TerminalServerTCPPortNo

Specific to	IEC-870 RTU Channel.
Type	Integer
Range	0 to 10000
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Terminal Server TCP Port No represents a TCP host name or an IP address, but it must match the TCP host name used when you installed and internally configured the terminal server. Enter the correct TCP host name/IP address in Terminal Server TCP Port No. The default value for this parameter is 0. The range for this parameter is 0 to 10000. It is available in the Port tab of the Channel's configuration form in Quick Builder. In a redundant configuration, this parameter is also available in the Redundant Port tab

TxDelayProcedureTimer

Specific to	IEC-870 RTU Controller
Type	Integer
Range	1 to 32767 milliseconds
Residence	Point Server
Default Value	20
Access Lock	View Only

Description	Represents the time for executing the Enable Tx Delay Acquisition procedure in milliseconds. This parameter is available in the Clock Sync tab of the controller's configuration form in Quick Builder. It is available only when the protocol type is 60870-5-101.

TransmitRetriesSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	View Only
Description	Stores the value of transmit retries sent. This parameter is available in the Statistics tab of the channel and controller's displays in the Station.

TransmitRetriesSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	View Only
Description	If there is an overflow in the value of the TransmitRetriesSent parameter, the check box corresponding to the TransmitRetriesSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller's displays in the Station.

TrendNumber

Specific to	IEC-870 Point
Type	Integer
Range	0 – 9999
Residence	Experion, Point Server
Default Value	0
Access Lock	Modifiable
Description	Trend Number represents the trend to which this point is assigned. Each trend is identified by a unique ID, which is an integer between 1 and 1000. This parameter is available in the Display tab of the point's configuration form in Quick Builder.

TrendParameter

Specific to	IEC-870 Point
Type	Character
Range	0 -255
Residence	Experion, Point Server
Default Value	PointState
Access Lock	Modifiable
Description	Trend Parameter represents the trend to which this point is assigned. Each trend is identified by a unique ID, which is an integer between 1 to 255. This parameter is available in the Display tab of the point's configuration form in Quick Builder.

TimeTag

Specific to	IEC RTU 870 Point
Type	Character
Range	NA

Residence	NA
Default Value	Format for date
Access Lock	Modifiable
Description	This indicates at what time the point changed its status in the field. This time can be viewed in the SoE page of the station.

TimesDFCBitWasSetintxsec

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This indicates the number of times the DFC bit was set in the tx sec Frame. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesDFCBitWasSetintxsecOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable

Description	If there is an overflow in the value of TimesDFCBitWasSetintxsec parameter, the check box corresponding to the TimesDFCBitWasSetintxsecOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesT1Expired

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This parameter stores the number of times T1 expired. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesT1ExpiredOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable

Description	If there is an overflow in the value of the TimesT1Expired parameter, the check box corresponding to the TimesT1ExpiredOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesT2Expired

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This parameter stores the number of times T2 expired. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesT2ExpiredOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the TimesT2Expired parameter, the check box corresponding to the TimesT2ExpiredOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display.

TimesT3Expired

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	This parameter stores the number of times T2 expired. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesT3ExpiredOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the TimesT3Expired parameter, the check box corresponding to the TimesT3ExpiredOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesTestMessageWasSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the number of times the test message was sent. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesTestMessageWasSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of TimesTestMessageWasSent parameter, the check box corresponding to the TimesTestMessageWasSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesStartDTWasSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the number of time the START-DT message was sent. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesStartDTWasSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of TimesStartDTWasSent parameter, the check box corresponding to the TimesStartDTWasSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesStopDTWasReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter

Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Indicates the number of times STOP-DT was received. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesStopDTWasReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of TimesStopDTWasReceived parameter, the check box corresponding to the TimesStopDTWasReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesDFCBitWasSetInrxsecFrame

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server

Default Value	0
Access Lock	Modifiable
Description	Indicates the number of times DFC bit was set in rx sec Frame. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesDFCBitWasSetInrxsecFrameOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of TimesDFCBitWasSetInrxsecFrame parameter, the check box corresponding to the TimesDFCBitWasSetInrxsecFrameOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesTestMessageWasReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable

Description	Indicates the number of times the test message was received. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TimesTestMessageWasReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the TimesTestMessageWasReceived parameter, the check box corresponding to the TimesTestMessageWasReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TXExpirations

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of TX Expirations. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TXExpirationsOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the TXExpirations parameter, the check box corresponding to the TXExpirationsOverFlow parameter is selected. To reset the value, click the Reset button. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TotalBytesReceivedIncludingOverhead

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 - 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of total bytes received including overhead. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TotalBytesReceivedIncludingOverheadOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of TotalBytesReceivedIncludingOverhead parameter, the check box corresponding to the TotalBytesReceivedIncludingOverheadOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TXIOErrors

Specific to	IEC-870 RTU Channel and Controller – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of the number of TX I/O errors. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

TXIOErrorsOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of TXIOErrors parameter, the check box corresponding to the TXIOErrorsOverFlow parameter is selected. To reset the value, click the Reset button. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

2.18 U

UFramesSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of UFrames sent. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

UFramesSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the UFramesSent parameter, the check box corresponding to the UFramesSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

UFramesWasReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of UFrames received. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

UFramesWasReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	If there is an overflow in the value of UFramesWasReceived, the check box corresponding to the UFramesWasReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

UnconfirmedDataFramesReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of unconfirmed data frames received. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

UnconfirmedDataFramesReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	This parameter is available in the Statistics tab of the channel and controller displays in the Station.

UnconfirmedDataFramesSent

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable

Description	Stores the value of unconfirmed data frames sent. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

UnconfirmedDataFramesSentOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 –Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of the UnconfirmedDataFramesSent parameter, the check box corresponding to the UnconfirmedDataFramesSentOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

UnsupportedSingleCharAcksReceived

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller – Display – Statistics parameter
Type	Long
Range	0 – 2147483647
Residence	Point Server
Default Value	0
Access Lock	Modifiable
Description	Stores the value of unsupported single character acknowledgements received. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

UnsupportedSingleCharAcksReceivedOverFlow

Specific to	IEC RTU 870 Channel and IEC RTU 870 Controller
Type	Enumeration
Range	0 – Not Overflow 1 – Overflow
Residence	Point Server
Default Value	0 – Not Overflow
Access Lock	Modifiable
Description	If there is an overflow in the value of UnsupportedSingleCharAcksReceived parameter, the check box corresponding to the UnsupportedSingleCharAcksReceivedOverFlow parameter is selected. To reset the value, click the Reset button corresponding to the parameter in the Station display. This parameter is available in the Statistics tab of the channel and controller displays in the Station.

2.19 X

XONXOFF

Specific to	IEC-870 Point
Type	Enumeration
Range	0 – None 1 – Input 2 – Output
Residence	Point Server
Default Value	0 – None
Access Lock	View Only
Description	The type of XON/XOFF software flow control used to stop a receiver from being overrun with messages from a sender. The types are: • None (default) • Input (use XON/XOFF to control the flow of data on the receive line) • Output (use XON/XOFF to control the flow of data on the transmit line)

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