File Format of Varexp.dat

UPDATES

Version	Author	Actions	Revision	Date	Distribution
2.01	JS			28/03/07	
2.02	JS			16/01/09	
2.03	JS			07/05/09	
2.10	JS			13/10/09	
2.11	JS			17/12/09	
2.20	JSB/JS	IEC 61850		16/02/10	
2.21	JS	IEC 61850		03/03/10	
2.22	JSB/JS	IEC 61850		08/04/10	
2.23	JSB	IEC 61850		04/05/10	
2.24	CB	IEC 60870-5-104		19/07/10	
2.25	CB	IEC 60870-5-104 ActiveStartUp in Sector		20/07/10	
2.26	CB	IEC 60870-5-104 Qualifiers by object type		23/07/10	
2.27	DL	12 fields for variable name		04/10/10	
2.28	JL	BACnet		05/10/10	
2.29	JSB	IEC 61850		07/10/10	
2.30	JS	OPC		07/10/10	
2.31	JL	BACnet: time synchronization		11/10/10	
2.32	JL	BACnet + IEC61850		09/11/10	
2.33	JS	LonWorks		18/11/10	
2.34	JL	LonWorks		01/03/11	
2.35	JS	OPC		31/03/11	
2.36	FrM	Equipment (DataFormat)		07/04/11	
2.37	CB	Equipment variables New formats		25/01/12	
2.38	CB	Lonworks variables Index update		31/01/12	
2.39	JL	BACnet		09/02/12	
2.40	JL,CB, FRM	BACnet, DNP3		28/02/13	
2.41	JL	BACnet		04/09/13	
2.42	FrM	Add Branch field		05/09/13	
2.43	JL	BACnet		18/09/13	
2.44	JSB	IEC 61850		19/09/13	
2.45	ED	SNMP		28/07/13	
2.46	JSB	Lonworks		09/10/14	
2.47	ED	Alarm latch behaviour		26/05/15	
2.48	JL	Update BACnet with global configuration, network interface, BBMD, log, schedule, calendar		25/05/16	

Version	Author	Actions	Revision	Date	Distribution
2.49	JS	OPC		17/11/16	
2.50	JCW	Associated labels; Field 46 - Name of associated label as a common parameter to all types of variables		02/01/17	New for 11.2
2.51	JCW	Add the existing Domains and Natures		21/02/17	Missed
2.52a	JCW	Associated label for bit unavailable; Default/standard associated labels		02/01/17	New for 12.0
2.52b	JCW	Update the description length from 80 to 255		30/03/17	
2.52c	JCW	Default alarm associated labels; Default user actions associated labels		24/05/17	Updated
2.53	JSB	IEC61850		23/05/17	
2.54	ABQ	OPC		24/05/17	
2.55	JL	Modify the limit size of BACnet network and device names		29/08/17	
2.56	JS	Correction on OPCGROUPDEF property		08/12/17	
2.57	ABQ	Missing OPC Server & Group parameters. Added characters escaping field for OPC variables.		08/08/18	
2.58	ABQ	OPC, slight disambiguiations		07/09/18	
2.59	ALDI/CB	Updated DNP3 & IEC104		24/09/18	
2.60	JL	Add properties for BACnet EDE files		09/11/18	

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CONTENTS

Dictionary

The import/export of the variables is done with the file VAREXP.DAT.

The names correspond to the options of each dialogue box except for the following field:

Variable tag name: value calculated and given by the system that is not accessible.

Description of a variable

The description of each variable can be broken down into 4 main parts:

The TYPE of the variable which give the structure to the data.

PARAMETERS COMMON to all variables.

Parameters specific to the COMMUNICATION OBJECT.

PARAMETERS SPECIFIC to the type of variable.

The variable TYPE is the first parameter on each line and is always one of the following abbreviations:

BIT	Bit
CMD	Bit and command
ALA	Alarm
ACM	Alarm and command
TSH	Threshold
ATS	Threshold and alarm
REG	Register
CTV	Register and command
CNT	Counter
CHR	Chronometer
TXT	Text
CXT	Text and command

The first 6 are describe in the Window ‘Bit configuration’ (Configure, Variable, Bit), the next 4 in the window ‘Register configuration’ (Configure, Variable, Register), the 2 last in the window ’Text configuration’ (Configure, Variable, Text).

In the explanation of the parameters that follows, the flags O, o, Y, y and 1 are all equivalent, as are N, n, 0 and space. Any other characters are interpreted as space.

The number corresponds to the rank of the field in the extended format file (VAREXP.DAT).

Parameters of branches

Format using 12 fields for storing variable names

N	Description	T	Size in bytes	Value
1	BRANCH	C	6	
2	Reserved	C	0	
3	1st element of the variable name	C	255	
4	2nd element of the variable name	C	255	
5	3rd element of the variable name	C	255	
6	4th element of the variable name	C	255	
7	5th element of the variable name	C	255	
8	6th element of the variable name	C	255	
9	7th element of the variable name	C	255	
10	8th element of the variable name	C	255	
11	9th element of the variable name	C	255	
12	10th element of the variable name	C	255	
13	11th element of the variable name	C	255	
14	Reserved	C	0	
15	Reserved	C	0	
16	Description Language 0	C	255	
17	Description Language 1	C	255	

Parameters common to all variables

(1) Format using 6+1 fields for storing variable names

N(1)	Description	T	Size in bytes	Value
1	Type of the variable BIT, CMD, ALA, ACM, TSH, ATS, REG, CTV, CNT, CHR, TXT, CXT)	C	3	
2	Variable internal ID	C	12	1 to 300000
3	1st element of the variable name	C	255	
4	2nd element of the variable name	C	255	
5	3rd element of the variable name	C	255	
6	4th element of the variable name	C	255	
7	5th element of the variable name	C	255	
8	6th element of the variable name	C	255	
9	$7^{th}.8^{th}.9^{Th}.10^{th}.11^{th}.12^{th}$	C	255	
10	Variable description (1st language)	C	255	
11	Variable description (2nd language)	C	255	
12	Domain	C	100	
13	Nature	C	100	
14	Inhibit flag(if yes "I")	C	1	I or nothing
15	Simulated flag (if yes "S")	C	1	S or nothing

(2) Format using 12 fields for storing variable names

N(2)	Description	T	Size in bytes	Value
1	Type of the variable BIT, CMD, ALA, ACM, TSH, ATS, REG, CTV, CNT, CHR, TXT, CXT)	C	3	
2	Variable internal ID	C	12	1 to 300000
3	1st element of the variable name	C	255	
4	2nd element of the variable name	C	255	
5	3rd element of the variable name	C	255	
6	4th element of the variable name	C	255	
7	5th element of the variable name	C	255	
8	6th element of the variable name	C	255	
9	7th element of the variable name	C	255	
10	8th element of the variable name	C	255	
11	9th element of the variable name	C	255	
12	10th element of the variable name	C	255	
13	11th element of the variable name	C	255	
14	12th element of the variable name	C	255	
15	Reserve			

16	Variable description (1st language)	C	255	
17	Variable description (2nd language)	C	255	
18	Domain	C	100	
19	Nature	C	100	
20	Inhibit flag(if yes "I")	C	1	I or nothing
21	Simulated flag (if yes "S")	C	1	S or nothing

N (2)	N (1)	Description	T	Size in bytes	Value
22	16	Permanent (saved) flag (if yes "P")	C	1	P or nothing
23	17	Source: E → if Equipment I → if Internal X → if external D → if DDE O → if OPC L → if LonWorks B → if BACnet 4 → if 60870-5-104 8 → if 61850 3 → if DNP3 S → if SNMP Manager (Ping)	C	1	 E I X D O L B 4 8 3 S
24	18	Diffusion indicator Use only when Source = I like Internal	N	2	0/1
25	19	Number of station or association of producer. Use only when Source = 'X' like External. Only for compatibility	N	2	[1,253]
26	20	Reserved			
27	21	Permanent subscription for mimics 0: All stations 1: None 2: Server station	N	2	 0 1 2
28	22	Object root. 0 if local !=0 if Customized layer	N	2	0/1
29	23	Variable with extended attribute (1) (columns 130 to 140) (2) (columns 136 to 146)	N	2	0/1

30	24	Reserved			
31	25	Remote access. Variable use by Third product like Alert.	N	2	0/1
32	26	Reserved			
33	27	Reserved			
34	28	Topology : server (producer) list name	C	40	
35	29	Topology : client (consumer) list name	C	40	
46	40	Name of associated label	C	255	
136	130	Binary attributes	N	4	0 to 4294967295
137	131	Test attribute 3	C	100	
138	132	Test attribute 4	C	100	
139	133	Test attribute 5	C	100	
140	134	Test attribute 6	C	100	
141	135	Test attribute 7	C	100	
142	136	Test attribute 8	C	100	
143	137	Test attribute 9	C	100	
144	138	Test attribute 10	C	100	
145	139	Test attribute 11	C	100	
146	140	Test attribute 12	C	100	
147	141	Test attribute 13	C	100	
148	142	Test attribute 14	C	100	
149	143	Test attribute 15	C	100	
150	144	Test attribute 16	C	100	
180	174	Visualization level	N	2	0 to 29
184	178	Is initial value	N	1	0/1
185	179	Initial value	C	255	
247	241	Reserved			

Equipment variables

N (2)	N (1)	Description	T	Size in bytes	Value
		Object Description (Media reference, Network name, Equipment name, Frame name)	C	80	
36	30	Card Number	C	8	
37	31	Network name	C	8	
38	32	Equipment name	C	12	
39	33	Frame name	C	20	
40	34	Format: B → Bit (positive logic) b → Bit (negative logic) I → Integer 16 bits signed (capital i) U → Integer 16 bits unsigned l → Integer 32 bits signed (lower case L) m → Integer 32 bits signed (swapped word) L → Integer 32 bits unsigned M → Integer 32 bits unsigned (swapped word) F → Float 32 bits signed c → Byte 8 bits signed C → Byte 8 bits unsigned S → Variable length string delimited by \0 s → Variable length string delimited by \0 (swapped) T → Fixed length string (=Size/8) t → Fixed length string (=Size/8) (swapped) d → Integer 2 bits unsigned (read-only) Q → Integer 4 bits unsigned(read-only) q → Integer 4 bits signed(read-only) D → Float 64 bits signed	C	1	 B b I U l m L M F c C S S T t d Q q D
41	35	Index (ID of the byte in the frame starting at 0)	N	2	
42	36	Complementary index (offset in bits in the byte pointed by "Index")	N	2	
43	37	Size (in bits)	N	2	

External variables

This variable source is obsolete. Prefer use variables with server association rather than external variables.

N (2)	N (1)	Description	T	Size in bytes	Value
25	19	Number of station or association of producer. Only for compatibility	N	3	[1,253]

DDE variables

N (2)	N (1)	Description	T	Size in bytes	Value
126	120	Conversation name	C	20	
127	121	Item name	C	20	
128	122	Reserved			
129	123	Reserved			
130	124	Item format	C	1	
131	125	Reserved			
132	126	Auto Format flag 1 if Auto (item name = Variable name)	C	1	
133	127	Label (used with DBDDE.DAT)	C	80	

OPC variables

N (2)	N (1)	Description	T	Size in bytes	Value
151	145	Server alias	C	10	
152	146	Group name	C	10	
153	147	Item name	C	255	
154	148	Access path	C	80	
155	149	Array item 1: the variable is mapped on an array item 0: otherwise	N	2	0/1
156	150	Array item index Available if “Array item” is 1	N	4	
157	151	Customization expression	C	30	See below
158	152	Escape characters 1: characters “ ‘ < > & are escaped " ' < > & in “Item name” and “Access path” fields 0: no changes applied (Default:1)	N	2	0/1

The customization expression can be one of the following:

- RAW_DEC(padding) : Translate an array of numeric (signed or unsigned integer on 1, 2 or 4 bytes) into a decimal string.
  Example: (10, 255, 56) gives “010255056” with a RAW_DEC(3)
- RAW_HEX(padding) : Translate an array of numeric (signed or unsigned integer on 1, 2 or 4 bytes) into a hexadecimal string.
  Example: (Ah, FFh, 1h, 0Fh, E3h) gives “0AFF010FE3” with a RAW_HEX(2)
- STRHEX_I1(x) : Extract a signed integer (1 byte) at the position x (in characters) from an hexadecimal string
  Example: STRHEX_I1(2) from “0AFF010FE3” extracts FFh
- STRHEX_I2(x) : Extract a signed integer (2 bytes) at the position x (in characters) from an hexadecimal string
  Example: STRHEX_I2(4) from “0AFF010FE3” extracts 010Fh
- STRHEX_I4(x) : Extract a signed integer (4 bytes) at the position x (in characters) from an hexadecimal string
  Example: STRHEX_I4(0) from “0AFF010FE3” extracts 0AFF010Fh
- STRHEX_QT(x) : Extract a signed integer (4 bits) at the position x (in characters) from an hexadecimal string
  Example: STRHEX_QT(3) from “0AFF010FE3” extracts 0Fh
- STRHEX_UI1(x) : Extract an unsigned integer (1 byte) at the position x (in characters) from an hexadecimal string
- STRHEX_UI2(x) : Extract an unsigned integer (2 bytes) at the position x (in characters) from an hexadecimal string
- STRHEX_UI4(x) : Extract an unsigned integer (4 bytes) at the position x (in characters) from an hexadecimal string

- STRHEX_R4(x) : Extract a floating-point real (4 bytes) at the position x (in characters) from an hexadecimal string
- STRHEX_R8(x) : Extract a floating-point real (8 bytes) at the position x (in characters) from an hexadecimal string
- STRHEX_BIT(x,y) : Extract a Boolean (1 bit) at the position x (in characters) offset y (0 to 3) from an hexadecimal string
  Example: STRHEX_BIT(0, 3) from “0AFF010FE3” extracts 0
  STRHEX_BIT(2, 0) from “0AFF010FE3” extracts 1
- WORDBIT(x,y): Extract a Boolean (1 bit) at the position x (in bytes) offset y (0 to 7) from an integer value
- SWITCH_STATE(*[x]*): Useful for LOYTEC L-INX devices in the case of LNS datatypes SNVT_switch. The result is a Boolean which is true when state is set to 1 and false when state is set to 0. When writing to this Boolean, the true value set the switch.value to x and the switch.state to 1, the false value set the switch.value to 0 and the switch.state to 0. The *x* parameter is optional; its default value is 100.

Note that the customization expression is ignored if the variable is mapped on an array item (i.e. the “Array item” field is set to 1).

LonWorks variables

N (2)	N (1)	Description	T	Size in bytes	Value
116	110	Network alias	C	30	
117	111	Node alias	C	200	
118	112	Variable name	C	200	
119	113	Network scanning mode 0 = the scanning mode is on event Else the value represents in (1/10 second) the variable scanning rate.	N	2	0/32000
120	114	Reserved			
121	115	Network variable field name.	C	80	
122	116	Reserved			
123	117	Monitoring definition 0 = Use the monitoring defined in SV 1 = Use the monitoring defined in LNSDB	N	1	0/1
124	118	Monitoring type 0 = The variable is monitored using polling 1 = The variable is monitored using binding		N1	0/1

The network variable field name can be:

- The field name of a structured variable: for example, the field name for a SNVT_switch can be state or value.
- A customization expression that allow you to extract canonical data from UNVT variable. The expression can be one of the following:
  - BIT(x,y)
  - UI1(x) : Extract an unsigned integer (1 byte) at the position x (in bytes).
  - UI2(x) : Extract an unsigned integer (2 bytes) at the position x (in bytes).
  - UI2R(x) : Extract an unsigned integer (2 bytes) at the position x (in bytes). The 2 bytes are swapped.
  - UI4(x) : Extract an unsigned integer (4 bytes) at the position x (in bytes).
  - UI4R(x) : Extract an unsigned integer (2 bytes) at the position x (in bytes) . The 2 words are swapped.
  - I1(x) : Extract an signed integer (1 byte) at the position x (in bytes).
  - I2(x)) : Extract an signed integer (2 bytes) at the position x (in bytes).
  - I2R(x)) : Extract an signed integer (2 bytes) at the position x (in bytes). The 2 bytes are swapped.
  - I4(x) : Extract an signed integer (4 bytes) at the position x (in bytes).

- I4R(x) : Extract an unsigned integer (2 bytes) at the position x (in bytes) . The 2 words are swapped.
- R4(x) : Extract an floating point (4 bytes) at the position x (in bytes) .
- RAW() : Display the whole value as a string. In this string, each byte is displayed in its decimal format separated by a comma.

BACnet variables

N(2)	N(1)	Description	T	Size in bytes	Value
169	163	Network alias	C	20	
170	164	Device alias	C	20	
171	165	Object Type	C	255	
172	166	Object Instance	C	255	
173	167	Property	C	255	
174	168	Fields	C	255	
175	169	Frequency	N	4	1 to ...
176	170	Change Of Value Type 0 = NoCov 1 = ConfirmedCov 2 = UnconfirmedCov	N		0/1/2
177	171	Priority	N	4	0 to 12
178	172	EDE file existe	N	1	0/1
179	173	Reserved			
210	204	EDE file name	C	255	
211	205	EDE Keyname	C	255	
224	218	BACnet variable type	N	4	0:Object 1:Property 2:Alarm/event
225	219	BACnet alarm type	N	4	0:Normal 1:Low limit 2:High limit

IEC61850 Master variables

N(2)	N(1)	Description	T	Size in bytes	Value
196	190	Mapping Type	N	1	0: Data object 1: Data attribute
197	191	61850 master network alias (Available in mapping type 0, 1)	C	20	
198	192	61850 master physical device alias (Available in mapping type 0, 1)	C	20	
199	193	61850 master data group alias (Available in mapping type 0, 1)	C	20	
200	194	61850 master data group member *Corresponding to dataset member...* (Available in mapping type 0, 1)	C	256	Separator: '.' Or '$'
201	195	Field (Available in mapping type 0, 1) *195+196 = DARef for mapping DA* *195+196 = DORef for mapping DO*	C	127	Separator: '.' Or '$' Default: Empty string
202	196	reserved	C	2	
203	197	Data object identifier (as defined in device profiles catalog) *Common Data Class* (Available in mapping type 0)	C		
204	198	Control model (Available in mapping type 0)	N	1	0: DE Normal security 1: DE Enhanced security 2: SBO Normal security 3: SBO Enhanced security
205	199	Use time provided by the device 0 -> yes 1 -> no	N	1	0/1 Default:0
206	200	Use quality provided by the device 0 -> yes 1 -> no	N	1	0/1 Default:0

IEC60870-5-104 Master variables

N(2)	N(1)	Description	T	Size in bytes	Value
186	180	Network name	C	256	
187	181	Device name	C	256	
188	182	Sector name	C	256	
189	183	IO Address	N	4	unsigned
190	184	Type	N	2	1: Single point 3: Double point 5: Step position 7: Bitstring 9: Measured value, normalized 11: Measured value, scaled 13: Measured value,short floating-point 15: Integrated totals
191	185	Writing address	N	4	unsigned
192	186	Select before operate	N	4	0: Default configuration 1: DE 2: SBO
193	187	Qualifier (QL/QU)	N	4	unsigned
194	188	Write time tagged	N	4	0: Default configuration 1: Yes 2: No
195	189	Mapping bit	N	4	
212	206	Signed	N	2	0: No signed 1: Signed
252	246	Time tagging	N	2	0: Default 1: Time tagged 2: No time tagged

DNP3 Master variables

N(2)	N(1)	Description	T	Size in bytes	Value
213	207	Network name	C	256	
214	208	Device name	C	256	
215	209	Type	N	2	Unknown = 0, BinaryInput = 1, BinaryOutput= 10, RunningCounter=20, FrozenCounter= 21, AnalogInput= 30, AnalogOutput= 40, IIN = 80, ATT= 1000
216	210	Point address	N	4	unsigned
217	211	AOB_PointVariation	N	2	32Bit = 1 16Bit = 2 Single precision Floating point = 3 Double precision Floating point = 4
219	213	Time tagging	N	2	Default = 0 Time tagged=1 No time tagged = 2
221	215	Select Before Operate	N	2	From global conf. = 0 Direct operate = 1 Direct op. no ack = 2 Select = 3
226	220	EnableWritingAdd_Val0	N	2	Enable different add for value 0: 1 (TRUE) disable different add for value 0: 0 (FALSE)
227	221	Add_Val0	N	4	unsigned
228	222	Options_Val0			Latch on: 0 Latch off: 1 Pulse on: 2 Trip and pulse on: 3 Close and pulse on: 4
229	223	OnTimeMS_Val0	N	4	unsigned
230	224	EnableWritingAdd_Val1	N	2	Enable different add for value 1: 1 (TRUE) disable different add for value 1: 0 (FALSE)
231	225	Add_Val1	N	4	unsigned

232	226	Options_Val1			Latch on: 0 Latch off: 1 Pulse on: 2 Trip and pulse on: 3 Close and pulse on: 4
233	227	OnTimeMS_Val1	N	4	unsigned
234	228	EnableWritingAdd_AOB	N	2	Enable different add for value 1: 1 (TRUE) disable different add for value 1: 0 (FALSE)
235	229	Add_AOB	N	4	unsigned
267	261	Override timezone sent by device	N	1	0: Enabled 1: Disabled
268	262	Specific timezone	N	1	0: (UTC-12:00) International Date Line West 1: (UTC-11:00) Coordinated Universal Time -11 ... 136: (UTC+14:00) Kiritimati Island

SNMP Manager variables

N(2)	N(1)	Description	T	Size in bytes	Value
236	230	Network name	C	20	
237	231	Device name	C	200	
238	232	Polling group	C	20	
239	233	Data type	N	4	Ping: Status = 1 Ping: Status code = 2 Ping: round-trip time = 3 Trap Coldstart = 101 TrapWarmstart = 102 Trap Linkstatus = 103 Trap AuthenticationFailure = 104 TrapEGPNeighborLoss = 105 Trap EnterpriseSpecific = 106 OID = 1001
240	234	OID	C	255	Either numerical or symbolic string
241	235	Disable reading (unreachable OID)	N	1	Default: Enabled = 0 Disable = 1
242	236	With initial value	N	1	Default without initial value = 0 With initial value = 1
243	237	Initial value	C	255	String
244	238	Offset	N	2	Unsigned Represent the port number for Trap linkstatus

245	239	Extraction Field	C		The only string allowed is Enum(X) Where is X is replaced by the value to be tested. If the value is equal to X then the variable is set to 1 otherwise it is set to 0

Internal variables

N(2)	N(1)	Description	T	Size in bytes	Value
24	18	Indication of the broadcast of the internal variable in multiple active association or single active association without internal switching. 1: Update of the internal variable on the other stations.	N	1	0/1

Bit (type BIT)

	N	Description	T	Size in bytes	Value
47	41	Log bit 0->1	N	2	0/1
48	42	Log bit 1 ->0	N	2	0/1
49	43	Reserved			
163	157	VCR	N	1	0/1

Bit in command (type CMD)

	N	Description	T	Size in bytes	Value
47	41	Log bit 0->1	N	2	0/1
48	42	Log bit 1 -> 0	N	2	0/1
49	43	Reserved			
50	44	Authorisation level	N	2	0 to 29
163	157	VCR	N	2	0/1

Alarm (type ALA)

N(2)	N(1)	Description	T	Size in bytes	Value
47	41	Log bit 0->1	N	2	0/1
48	42	Log bit 1 -> 0	N	2	0/1
49	43	Reserved			
51	45	Alarm level	N	2	0 to 29
52	46	Alarm	N	2	0/1
53	47	Name of bit for mask	C	40	
54	48	Alarm Temporization	N	4	In multiple of second
163	157	VCR	N	2	0/1

Alarm in command (type ACM)

N(2)	N(1)	Description	T	Size in bytes	Value
47	41	Log bit 0->1	N	2	0/1
48	42	Log bit 1 -> 0	N	2	0/1
49	43	Reserved			
50	44	Authorisation level	N	2	0 to 29
51	45	Alarm level	N	2	0 to 29
52	46	Alarm	N	2	0/1
53	47	Name of bit for mask	C	40	
163	157	VCR	N	2	0/1

Threshold (type TSH)

N(2)	N(1)	Description	T	Size in bytes	Value
47	41	Log bit 0->1	N	2	0/1
48	42	Log bit 1 -> 0	N	2	0/1
49	43	Reserved			
56	50	Hysteresis	N	4	
57	51	Value	N	4	
58	52	Threshold high (1) or low (0)	N	2	0/1
59	53	Name of register variable(REG)	C	40	
60	54	Threshold system	N	2	0 to 4
61	55	Threshold type	N	2	0 to 3
163	157	VCR	N	2	0/1

Threshold and alarm (type ATS)

N(2)	N(1)	Description	T	Size in bytes	Value
47	41	Log bit 0->1	N	2	0/1
48	42	Log bit 1 -> 0	N	2	0/1
49	43	Reserved			
51	45	Alarm level	N	2	0 to 29
52	46	Alarm	N	2	0/1
53	47	Name of bit used for mask	C	40	
56	50	Hysteresis	N	4	
57	51	Value	N	4	
58	52	Threshold high (1) or low (0)	N	2	0/1
59	53	Name of register variable (REG)	C	40	
60	54	Threshold system	N	2	0 to 4
61	55	Threshold type	N	2	0 to 3
163	157	VCR	N	2	0/1

All type of Alarm

N(2)	N(1)	Description	T	Size in bytes	Value
164	158	Expression branch	C	40	
165	159	Expression template for alarm mask	C	80	
166	160	Latch behavior (available for SNMP and equipment variable source)	N	2	0: No 1: Yes
181	175	Acknowledgment level	N	2	-1 to 29
182	176	Mask level	N	2	-2 to 29
183	177	Maintenance level	N	2	-2 to 29

Register (type REG)

N(2)	N(1)	Description	T	Size in bytes	Value
66	60	Measurement units	C	40	
67	61	Deadband	N	4	
68	62	Minimum display value	N	4	
69	63	Maximum display value	N	4	
70	64	Scaling	N	2	0/1
71	65	Minimum equipment value	N	4	
72	66	Maximum equipment value	N	4	
73	67	Display format	C	40	
162	156	Deadband type	N	2	0/1/3
163	157	VCR	N	2	0/1

Register and command (type CTV)

N(2)	N(1)	Description	T	Size in bytes	Value
66	60	Measurement units	C	40	
67	61	Deadband	N	4	
68	62	Minimum display value	N	4	
69	63	Maximum display value	N	4	
70	64	Scaling	N	2	0/1
71	65	Minimum equipment value	N	4	
72	66	Maximum equipment value	N	4	
73	67	Display format	C	40	
76	70	Minimum control value	N	4	
77	71	Maximum control value	N	4	
78	72	Authorisation level	N	2	0 to 29
162	156	Deadband type	N	2	0/1/3
163	157	VCR	N	2	0/1

Counter (type CNT)

N(2)	N(1)	Description	T	Size in bytes	Value
66	60	Measurement units	C	40	
67	61	Deadband	N	4	
68	62	Minimum display value	N	4	
69	63	Maximum display value	N	4	
70	64	Scaling	N	2	0/1
71	65	Minimum equipment value	N	4	
72	66	Maximum equipment value	N	4	
73	67	Display format	C	40	
86	80	Size of step	N	4	
87	81	Decrement(0) or increment(1) counter	N	2	0/1
88	82	Name of bit on which to count	C	40	
80	83	Count on transition to 0 or 1	N	2	0/1
90	84	Name of bit on which to reset counter	C	40	
91	85	Reset on transition to 0 or 1	N	2	0/1
162	156	Deadband type	N	2	0/1/3
163	157	VCR	N	2	0/1

Chronometer (type CHR)

N(2)	N(1)	Description	T	Size in bytes	Value
66	60	Measurement units	C	40	
67	61	Deadband	N	4	
68	62	Minimum display value	N	4	
60	63	Maximum display value	N	4	
70	64	Scaling	N	2	0/1
71	65	Minimum equipment value	N	4	
72	66	Maximum equipment value	N	4	
73	67	Display format	C	40	
96	90	Chronometer period (in seconds)	N	2	
97	91	Chronometer increment (1) or decrement (0)	N	2	0/1
98	92	Name of bit variable to enable chrono	C	40	
99	93	Enable on 0 or 1	N	2	0/1
100	94	Name of bit on which to reset chrono	C	40	
101	95	Reset on transition to 0 or 1	N	2	0/1
162	156	Deadband type	N	2	0/1/3
163	157	VCR	N	2	0/1

Text (type TXT)

N(2)	N(1)	Description	T	Size in bytes	Value
106	100	Maximum number of characters	N	2	
107	101	Write authorised	N	2	1
109	103	Display format	C	40	
163	157	VCR	N	2	0/1

Text in command (type CXT)

N(2)	N(1)	Description	T	Size in bytes	Value
106	100	Maximum number of characters	N	2	
107	101	Write authorised	N	2	1
108	102	Authorisation level	N	2	0 to 29
109	103	Display format	C	40	
163	157	VCR	N	2	0/1

Acquisition mode for OPC variables

OPC global description

N	Description	T	Size in bytes	Value
1	Description identifier	C	6	OPCCONF
2	Version	N	2	3
3	Delay before invalidating variables -1: Never 0: Immediately 1-32767: After a delay (in seconds)	N	2	-1 - 32767
4	Variable status when quality is bad 0: Unavailable (NS) 1: Non accessible (NS COM)	N	2	0-1
5	Use local timestamp upon reconnection	N	1	0/1

OPC server description

N	Description	T	Size in bytes	Value
1	Description identifier	C	6	OPCDEF
2	OPC server alias	C	10	
3	Computer name where the OPC server is hosted. If the server and the client are on the same computer, this property should be an empty string.	C	128	
4	OPC server name	C	128	
5	Activate at start-up 1 = enable.	N	1	0/1
6	OPC variable scanning method 0 : Use “*” string as filter 1 : Use “” (empty string) as filter (default)	N	1	0/1
7	Try to reconnect if the connection fails 0 : Disable 1 : Enable	N	1	0/1
8	Server status scanning rate (in millisecond)	N	4	
9	Reconnection period (in millisecond). In case reconnection are enabled	N	4	
10	Object root. 0 if local >0 if Business layer ("couche métier")	N	2	
11	Topology : server association	C	40	
12	Deprecated field			Empty
13	Version Present version is 8.	N	2	8
14	OPC Server type 0: automatic 1: OPCDA 1.0 2: OPCDA 2.0 3: OPCDA 3.0	N	2	0-3
15	Waiting period before creating group (in millisecond)	N	4	
16	Description	N	80	
17	Frozen context detection level 1 (in millisecond)	N	4	
18	Frozen context detection level 2 (in millisecond)	N	4	

19	Item properties browsing 0 : No browsing 1 : Browse standard properties 2 : Browse additional properties	N	2	0 - 2
20	Advanced reconnection strategy 0 : Disable 1 : Enable	N	1	0/1
21	Consider uncertain quality as 0 : Good quality 1 : Bad quality	N	1	0/1
22	Use new values even when quality is bad 0 : Disable 1 : Enable	N	1	0/1

OPC group description

N	Description	T	Size in bytes	Value
1	Description identifier	C	11	OPCGROUPDEF
2	OPC Server alias to which the group is linked.	C	10	
3	Group name	C	10	
4	Activate at start-up 1 = enable.	N	1	0/1
5	Group scanning rate (in millisecond)	N	4	
6	Group deadband (in %)	N	8 (real)	
7	Time offset to apply to the local server time. (in minute). 0 = No offset applied	N	4 (signed)	
8	Version Present version is 18.	N	2	18
9	OPC time stamped 0 : Time stamped by the supervisor. 1 : Time stamped by the OPC server.	N	1	0/1
10	Granularity: limit the transaction size between the SCADA and the server	N	4	
11	Deprecated field			Empty
12	Object root. 0 if local >0 if Business layer ("couche métier")	N	2	
13	Topology : server association	C	40	
14	Inactive group while connecting items	N	1	0/1
15	Synchronize items after connection 0: No synchronize 1: Synchronize by cache refresh 2: Synchronize by cache read 3: Synchronize by device refresh 4: Synchronize by device read	N	2	0 - 4
16	Read after write 0 : No synchronization 1: Synchronize by cache read 2: Synchronize by device read	N	2	0-2
17	Read mode 0: Automatic detection 1: Synchronous mode (OPCDA 1.0) 2: Asynchronous mode (OPCDA 1.0) 3: Asynchronous mode (OPCDA 2.0)	N	2	0-3

18	Write mode 0: Automatic detection 1: Synchronous mode (OPCDA 1.0) 2: Asynchronous mode (OPCDA 1.0) 3: Asynchronous mode (OPCDA 2.0)	N	2	0-3
19	Apply no flow regulation 1: Regulation inactive 0: Regulation active	N	1	0/1
20	Swap the byte order when considering numeric array as string	N	1	0/1
21	Update mode 0: Update by notification 1: Update by cycling read 2: Update by requesting read (read are done by program)	N	2	0-2
22	Timestamp kind When timestamping is done by the server: 0: server timestamp is UTC (GMT) 1: server timestamp is customized In this case only, Time offset (7) and DST (24) are used. 2: server timestamp is local	N	2	0-2
23	Use server deadband	N	1	0/1
24	Use DST (Daylight saving time)	N	1	0/1
25	Update immediately written value Dispatch the updated value regardless of the scan rate	N	1	0/1
25	Conversion source 0: Conversion done by the SCADA 1: Conversion done by the server	N	2	0/1
26	Description	C	80	
27	Asynchronous write warning timeout (in millisecond)	N	4	
28	Asynchronous write error timeout (in millisecond)	N	4	
29	Preserve value if the quality is bad	N	1	0/1
30	Use wait time Only for XML OPC group	N	1	0/1
31	Wait time (in millisecond). Only considered for XML OPC group and if field 30 (use wait time) is set to 1.	N	2	
32	Invalidate variables after a delay -1 : never 0: Immediately >0 : Value in millisecond	N	2	
33	Interoperability issue: Group name imposed by the server	C	255	

Acquisition mode for LonWorks variables

LonWorks server description

N	Description	T	Size in bytes	Value
1	Description identifier	C	6	LNSNET
2	LonWorks network alias	C	30	
3	Interface name	C	80	
4	Network name	C	255	
5	System name	C	255	
6	Activate at start-up 1 = enable.	N	1	0/1
7	Access type 0 : local access 1 : distant access	N	1	0/1
8	Access mode 0 : multi-user access 1 : single-user access	N	1	0/1
9	Catalogue path	C	128	

LonWorks node description

N	Description	T	Size in bytes	Value
1	Description identifier	C	7	LNSNODE
2	Node alias	C	200	
3	Network alias to which the node is linked to.	C	10	
4	Sub-system to which the node is linked to. In case of a interlinked system, every sub-system as to be separated by "#"	C	128	
5	Node name	C	80	
6	Activate at start-up 1 = enable.	N	1	0/1

Acquisition mode for BACnet variables

BACnet global configuration description

N	Description	T	Size in bytes	Value
1	Description identifier	C	7	BACCONF
2				
3	Reserved			
4	Bad devices verification period	N	4	1 to 3600
5	Current version	N	4	
6	Cov life time	N	1	1 to 10080
7	Number of APDU retries	N	4	0 to 20
8	APDU timeout	N	4	1 to 3600000
9	Browsing network timeout	N	4	1 to 3600
10	Reserved			
11	Reserved			
12	Reserved			
13	Reserved			
14	Reserved			
15	Reserved			
16	Reserved			
17	Reserved			
18	Ack alarm	N	2	0: no ack 1: by system 2: by user
19	Automatic time synchronization	N	1	0/1
20	Times synchronization method	N	1	0: Broadcast UTC 1: Broadcast local 2: Multicast auto
21	Time synchronization interval	N	2	0 to 1440
22	Align intervals	N	1	0/1
23	Interval offset	N	2	0 to 1440
24	Process Id	N	4	1 to 4294967295
25	Global max device actions	N	2	2 to 40
26	Active Backup&Restore	N	1	0/1
27	Active CommunicationControl command	N	1	0/1
28	Active ReinitializeDevice command	N	1	0/1
29	Active Create/delete object commands	N	1	0/1

BACnet network interface description

N	Description	T	Size in bytes	Value
1	Description identifier	C	7	BACPORT
2	BACnet network interface alias	C	22	
3	Network Id	N	2	
4	IP address	C	15	
5	Port	N	2	1 to 65535
6	Current version	N	4	
7	Station name	C	14	
8	FDT IP address	C	15	
9	FDT port	N	2	1 to 65535
10	Node name	C	16	
11	Local Device Id	N	4	
12	BACnet network alias	C	20	

BACnet BBMD list description

N	Description	T	Size in bytes	Value
1	Description identifier	C	11	BACBBMDLIST
2	Current version	N	4	
3	BACnet BBMD list alias	C	255	
4	Networking association station	C	40	

BACnet BBMD description

N	Description	T	Size in bytes	Value
1	Description identifier	C	7	BACBBMD
2	Current version	N	4	
3	BACnet BBMD alias	C	22	
4	IP address	C	15	
5	Port	N	2	1 to 65535
6	Mask	C	15	

BACnet network description

N	Description	T	Size in bytes	Value
1	Description identifier	C	6	BACNET
2	BACnet network alias	C	30	
3	Network description	C	255	
4	Activate at launch	N	4	
5	Server list	C	40	
6	Object origin	N	1	
7	Current version	N	4	
8	Activate network scanner at start-up	N	1	0/1
9	Backup&Restore folder	C	255	

BACnet device description

N	Description	T	Size in bytes	Value
1	Description identifier	C	6	BACDEV
2	BACnet network alias	C	30	
3	BACnet device alias	C	200	
4	Description	C	255	
5	Activate at launch	N	4	
6				
7	Object origin	N	1	
8	Current version	N	4	
9	BACnet address	N	4	0 to 4194302
10	Object Type (watchdog)	C	255	
11	Object Instance (watchdog)	C	255	
12	Property (watchdog)	C	255	
13	Frequency (polling watchdog)	N	4	1 to 60000
14	Device type	N	1	0: classic 1: EDE
15	EDE file name	C	255	
16	EDE keyname	C	255	
17	Timestamp by device	N	1	0/1
18	Reserved			
19	Reserved			
20	Update the variable immediately with the written value	N	1	0/1
21	Use the scale value to display the value of accumulator object	N	1	0/1

22	Use automatically the polling mode if Cov/uCov is not supported by the device	N	1	0/1
23	Use static binding	N	1	0/1
24	BACnet Mac Address for static binding	C	23	
25	Network identifier for static binding	N	2	
26	Use flag Fault of status-flags for quality	N	1	0/1
27	Use flag OutOfService of status-flags for quality	N	1	0/1
28	Use flag Overridden of status-flags for quality	N	1	0/1
29	Password for ReinitializeDevice commands	C	20	
30	Backup&Restore: auto adaptability	N	1	0/1
31	Backup&Restore: file-size	N	4	1 to 100000
32	Backup&Restore: record-count	N	4	1 to 100000
33	Backup&Restore: timeout	N	4	1 to 1440
34	Backup&Restore: use timeout	N	1	0/1
35	BACnet DCC service: time duration	N	4	

BACnet EDE file description

N	Description	T	Size in bytes	Value
1	Description identifier	C	6	BACEDE
2	BACnet network alias	C	30	
3	BACnet EDE file (path + file name)	C	255	
4	Current version	N	4	
5	Delimiter character	N	2	0: Automatic 1: Colon 2: Comma 3: Semicolon 4: Space 5: Tabulation
6	Code page	N	2	0: ANSI 1: OEM 2: UTF-8
7	Alias name	C	255	
8	Header name of keyname	C	255	
9	Header name of device instance	C	255	
10	Header name of object name	C	255	
11	Header name of object type	C	255	
12	Header name of object instance	C	255	
13	Header name of description	C	255	
14	Header name of present value default	C	255	
15	Header name of min present value	C	255	
16	Header name of max present value	C	255	
17	Header name of settable	C	255	
18	Header name of supports COV	C	255	
19	Header name of high limit	C	255	

20	Header name of low limit	C	255	
21	Header name of state text reference	C	255	
22	Header name of unit code	C	255	
23	Header name of vendor specific address	C	255	
24	Header name of notification-class	C	255	

BACnet notification description

N	Description	T	Size in bytes	Value
1	Description identifier	C	6	BACNOC
2	BACnet network alias	C	30	
3	BACnet device alias	C	200	
4	BACnet notification alias	C	50	
5	Description Language 0	C	255	
6	Activate at start-up	N	4	
7				
8	Object origin	N	1	
9	Current version	N	4	
10	Identifier number	N	4	
11	Reference type	N	4	0: classic 1: EDE
12	EDE file	C	255	
13	EDE keyname	C	255	
14	Active watchdog	N	1	0/1
15	Watchdog polling period	N	4	1 to 60000
16	Confirmed notification events	N	1	0/1
17	Automatic resubscription	N	1	0/1
18	Description Language 1	C	255	

BACnet log description

N	Description	T	Size in bytes	Value
1	Description identifier	C	6	BACLOG
2	BACnet network alias	C	30	
3	BACnet device alias	C	200	
4	BACnet log alias	C	50	
5	Description Language 0	C	255	
6	Activate at start-up	N	4	
7	Object origin	N	1	
8	Current version	N	4	
9	Identifier number	N	4	
10	Reference type	N	4	0: classic 1: EDE
11	Log object type	N	4	20: trend-log 25: event-log 27: trend-log-multiple
12	EDE file	C	255	
13	EDE keyname	C	255	
14	Active cyclic	N	1	0/1
15	Polling interval for cyclic	N	4	1 to ...
16	On demand only	N	1	0/1
17	Reset buffer	N	4	
18	Accept notifications	N	1	0/1
19	Number of records	N	4	1 to 10000
20	Description Language 1	C	255	

BACnet schedule description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	BACSCHED
2	BACnet network alias	C	30	
3	BACnet device alias	C	200	
4	BACnet schedule alias	C	306	
5	Current version	N	4	
6	Description Language 0	C	255	
7	Description Language 1	C	255	
8	Activate at launch	N	4	
9	Object origin	N	1	
10	Identifier number	N	4	
11	Reference type	N	4	0: classic 1: EDE
12	EDE file name	C	255	
13	EDE keyname	C	255	
14	Use default-values	N	1	0/1

BACnet calendar description

N	Description	T	Size in bytes	Value
1	Description identifier	C	11	BACCALENDAR
2	BACnet network alias	C	30	
3	BACnet device alias	C	200	
4	BACnet calendar alias	C	306	
5	Current version	N	4	
6	Description Language 0	C	255	
7	Description Language 1	C	255	
8	Activate at launch	N	4	
9	Object origin	N	1	
10	Identifier number	N	4	
11	Reference type	N	4	0: classic 1: EDE
12	EDE file name	C	255	
13	EDE keyname	C	255	

Acquisition mode for IEC61850 Master

IEC61850 configuration description

N	Description	T	Size in bytes	Value
1	Description identifier	C	7	M61850CONF
2	Max PU size: Maximum size of an assembled MMS message	N	2	128..65535
3	Default originator identifier for select/operate of controls	C		Default: ‘00’H
4	Default originator category for select/operate of controls: 0 -> “not-supported” 1 -> “bay-control” 2 -> “station-control” 3 -> “remote-control” 4 -> “automatic-bay” 5 -> “automatic-station” 6 -> “automatic-remote” 7 -> “maintenance” 8 -> “process”	N	1	0..8 Default: 2
5	Default Test for select/operate of controls 0 -> Disable 1 -> Enable	N	1	0/1 Default: 0
6	Default Check bitstring for select/operate of controls 00 -> Synchrocheck and interlock-check disable 10 -> Synchrocheck Enable and interlock-check disable 01 -> Synchrocheck Disable and interlock-check Enable 11 -> Synchrocheck and interlock-check Enable	C	2	Default: 00
7	Use timestamp quality 0 -> no 1 -> yes	N	1	0/1 Default: 1
8	Bit value of OFF 0 -> 01 is OFF (Default) 1 -> 10 is OFF	N	1	0/1 Default: 0
9	Bit value of ON 0 -> 10 is ON (Default) 1 -> 01 is ON	N	1	0/1 Default: 0

IEC61850 network description

N	Description	T	Size in bytes	Value
1	Description identifier	C	7	M61850NET
2	Network alias	C	20	
3	Description	C	80	
4	Activate at start-up 1 = enable.	N	1	0/1
5	Server list	C	40	
6	Object origin	N	1	
7	Current version	C	2	
8	Local Detail (Parameters for Initiate request)	N	2	128..65535 Default: 65435
9	Services calling (Parameters for Initiate request)	N	2	1..50 Default: 10
10	Services called (Parameters for Initiate request)	N	2	1..50 Default: 10
11	Nest level (Parameters for Initiate request)	N	2	1..20 Default: 5
12	Version number (Parameters for Initiate request)	N	2	Default: 1
13	Reserved			
14	Reserved			
15	Reserved			
16	Reserved			
17	Reserved			
18	Reserved			
19	Reserved			
20	Reserved			
21	Reserved			
22	Reserved			
23	Reserved			
24	Reserved			
25	Reserved			
26	Local TSAP: Transport address for this client	C	99	Default: 0#1
27	TCP Max SDU Size: Maximum size of assembled RFC1006 message	N	1	Default: 65435
28	TCP buffer size: Maximum buffer size for use in RFC1006	N	1	Default: 4096
29	TCP num Buffers: Total number of buffers to use for RFC1006	N	1	1..500 Default: 200
30	TCP Num Connections: Total number of connections to allow for RFC1006	N	1	1..50 Default: 5
31	TCP Num Queue Len: Total number of messages to allow on RFC1006 queues	N	1	2..500 Default: 200

32	TCP input Queue Len: Number of messages to allow on each connection input queue	N	1	1..500 Default: 65
33	TCP Output Queue Len: Number of messages to allow on each connection output queue	N	1	1..500 Default: 65
34	TCP use Listen: Listen for incoming connection over RFC1006	N	1	0/1 Default: 0
35	Max Parallel requests: Set maximun of parallel request send by a network.	N	1	1..255 Default: 10

IEC61850 Physical device description

N	Description	T	Size in bytes	Value
1	Description identifier	C	7	M61850DEV
2	Network alias	C	20	
3	Physical device alias	C	20	
4	Description	C	80	
5	Activate at start-up 1 = enable.	N	1	0/1
6	Object origin	N	1	
7	Current version	C	2	
8	IP address of the physical device	C	15	Separator: '.' Or '#' default: 127.0.0.1
9	Reserved			
10	UL Name	C	81	default: ""
11	Authent Enabled: Determines use of ACSE authentication	N	1	1/0 default: 0
12	Authent Mechanism: Selects mechanism name for ACSE authentication	C	99	default: 0
13	Authent Password: Password to use for ACSE Authentication	C	81	default: 0
14	Local AE Qualifier: ACSE AE Qualifier of this client	N	1	0..65535 default: 12
15	Remote AE Qualifier: ACSE AE Qualifier of remote device	C	1	0..65535 default: 12
16	Local AP ID: ACSE AP Title of this client	C	99	default: 1#1#999#1
17	RemoteAP ID: ACSE AP Title of remote device	C	99	default: 1#1#999#1
18	Remote P Selector: Presentation address of remote device	C	99	default: 0#0#0#1
19	Local P Selector: Presentation address of this client	C	99	default: 0#0#0#1
20	Remote S Selector: Session address of remote device	C	99	default: 0#1
21	Local P Selector: Session address of this client	C	99	default: 0#1
22	Connection Type: type of connection to use with the remote device	N	1	0: Short 1: Full (default) 2: Fastbyte 3: None

23	Remote T Selector: Transport address of remote device	C	99	default: 0#1
24	Local T Selector: Transport address of this client	C	99	default: 0#1
25	Remote MAC: Data link address of remote device	C	99	default: 0
26	Profile device ID from 61850Catalog.xml	C	127	Default: Generic61850_ed1
27	reserved			
28	Time out: global time out for each request send to physical device in millisecond.	N	1	0.. 4294967295 Default: 3000
29	Reconnection period: time in millisecond to wait before to try to reconnect	N	1	1000..600000 Default: 5000
30	reserved			
31	Watchdog polling period in millisecond. 0 to disable polling.	N	1	0.. 4294967295 Default: 5000
32	Device port	N	2	1 to 65535 Default: 102
33	Override global definition of bit value ON/OFF 0 -> use global definition of bit value 1 -> override global definition of bit value	N	1	0/1 Default: 0
34	Bit value of OFF 0 -> 01 is OFF (Default) 1 -> 10 is OFF	N	1	0/1 Default: 0
35	Bit value of ON 0 -> 10 is ON (Default) 1 -> 01 is ON	N	1	0/1 Default: 0

IEC61850 Data-Set description

N	Description	T	Size in bytes	Value
1	Description identifier	C	7	M61850DS
2	Network alias	C	20	
3	Physical device alias	C	20	
4	Data group alias	C	20	
5	Full Data-Set name	C	256	Separator: '.' Or '$'

6	Description	C	80	
7	Activate at start-up 1 = enable.	N	1	0/1
8	Object origin	N	1	
9	Acquisition type	N	1	0: Polling (default) 1: Request by program
10	Polling period (milliseconds)	N	4	default: 1000
11	Current version	N	2	1

IEC61850 Report description

N	Description	T	Size in bytes	Value
1	Description identifier	C	7	M61850DR
2	Network alias	C	20	
3	Physical device alias	C	20	
4	Data group alias	C	20	
5	Full RCB (Report control block) name	C	256	Separator: '.' Or '$'
6	Description	C	80	
7	Activate at start-up 1 = enable.	N	1	0/1
8	Object origin	N	1	
9	Acquisition type	N	1	0: URCB 1: BRCB
10	Current version	N	2	1
11	Report Timer in millisecond (only for BRCB)	N	1	Default: 10000
12	Report Counter (only for BRCB)	N	1	Default: 100
13	Trigger Option	N	1	0-4..124 Default: 108
14	Optional fields to include in report	N	1	0..511 URCB Default: 370 BRCB Default: 382
15	Buffer Time	N	1	Default: 100
16	Integrity period	N	1	Default: 0
17	reserved			
18	Global interrogation cyclic period in millisecond	N	1	Default:20000
19	Reconnection polling period in millisecond	N	1	Default:5000
20	Parameter to send or not integrity period. 1 = yes, 0 = no	N	1	1/0 Default: 1

21	Parameter to send or not buffer time. 1 = yes, 0 = no	N	1	1/0 Default: 1
22	Parameter to send or not triggers options. 1 = yes, 0 = no	N	1	1/0 Default: 1
23	Parameter to send or not optional fields. 1 = yes, 0 = no	N	1	1/0 Default: 1
24	Parameter to send or not report identifier. 1 = yes, 0 = no	N	1	1/0 Default: 1

IEC61850 Data Group description

N	Description	T	Size in bytes	Value
1	Description identifier	C	7	M61850DG
2	Network alias	C	20	
3	Physical device alias	C	20	
4	Data group alias	C	20	
5	Reserved			
6	Description	C	80	
7	Activate at start-up 1 = enable.	N	1	0/1
8	Object origin	N	1	
9	Acquisition type	N	1	0: Polling (default) 1: Request by program
10	Polling period (milliseconds)	N	4	default: 1000
11	Current version	N	2	1

Acquisition mode for IEC60870-5-104 Master

IEC60870-5-104 configuration description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	M104CONF
2	RESERVED			
3	DE/SBO for Bitstring	N	2	1: DE 2: SBO
4	DE/SBO for Double point	N	2	1: DE 2: SBO
5	Qualifier QU for Double point	N	1	0-31
6	DE/SBO for Floating point	N	2	1: DE 2: SBO
7	Qualifier QL for Floating point	N	1	0-127
8	DE/SBO for Normalized	N	2	1: DE 2: SBO
9	Qualifier QL for Normalized	N	1	0-127
10	DE/SBO for Step position	N	2	1: DE 2: SBO
11	Qualifier QU for Step position	N	1	0-31
12	DE/SBO for Scaled	N	2	1: DE 2: SBO
13	Qualifier QL for Scaled	N	1	0-127
14	SE/SBO for Single point	N	2	1: DE 2: SBO
15	Qualifier QU for Single point	N	1	0-31
16	Timetagged for Bitstring	N	2	0/1
17	Timetagged for Double point	N	2	0/1
18	Timetagged for Floating point	N	2	0/1
19	Timetagged for Normalized	N	2	0/1
20	Timetagged for Step position	N	2	0/1
21	Timetagged for Scaled	N	2	0/1
22	Timetagged for Single point	N	2	0/1
23	Overflow as invalid quality (OV)	N	2	0/1
24	Blocked as invalid quality (BL)	N	2	0/1
25	Substituted as invalid quality (SB)	N	2	0/1
26	Not topical as invalid quality (NT)	N	2	0/1
27	Invalid as invalid quality (IV)	N	2	0/1
28	RESERVED			
29	RESERVED			
30	Intermediate for Double point	N	1	1: Raw value [00] 2: Raw value [11]
31	Off for Double point	N	1	1: Raw value [01] 2: Raw value [10]

32	On for Double point	N	1	1: Raw value [01] 2: Raw value [10]
33	Indeterminate for Double point	N	1	1: Raw value [00] 2: Raw value [11]
34	Intermediate time delay for Double point	N	4	Unsigned
35	Indeterminate time delay for Double point	N	4	Unsigned
36	Register or Text mapping apply invalidating rules as for bit variables	N	1	1: Enable 0: Disable
37	Current version	C	2	
38	Use local time stamp upon device reconnection	N	1	1: Enable 0: Disable
39	Delay before bad quality	N	1	-1: Never 0: Immediately >0: Delay

IEC60870-5-104 network description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	M104NET
2	Network alias	C	20	
3	Description	C	80	
4	Activate at start-up 1 = enable.	N	1	0/1
5	Server list	C	40	
6	Object origin	N	1	
7	Current version	C	2	

IEC60870-5-104 device description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	M104DEV
2	Network alias	C	20	
3	Device alias	C	20	
4	Description	C	80	
5	IP address	C	14	
6	Port	N	2	
7	Originator address	N	2	
8	Time-out of connection establishment (T0)	N	2	seconds
9	Time-out of send or test APDUs (T1)	N	2	seconds
10	Time-out for acknowledges in case of no data message t2>t1 (T2)	N	2	seconds
11	Time-out for sending test frames in case of a long idle state (T3)	N	2	seconds
12	K	N	2	
13	W	N	2	
14	Application layer Time-out	N	2	seconds
15	Activate at start-up 1 = enable.	N	1	0/1
16	Object origin	N	1	
17	Current version	C	2	

IEC60870-5-104 sector description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	M104SEC
2	Network alias	C	20	
3	Device alias	C	20	
4	Sector alias	C	20	
5	Description	C	80	
6	Address	N	2	unsigned
7	Activate at start-up 1 = enable.	N	1	0/1
8	Use time tag command	N	2	0/1
9	ACT_TERM	N	2	0/1
10	Structured	N	2	0:Unstructured 1:Structured 1-Byte 2:Structured 2-Bytes 3:Structured 3-Bytes
11	End of init request GI	N	2	0/1
12	End of init request CS	N	2	0/1
13	End of init request CI	N	2	0/1
14	Online request GI	N	2	0/1
15	Online request CS	N	2	0/1
16	Online request CI	N	2	0/1
17	Support spontaneous	N	2	0/1
18	GI polling period	N	4	unsigned
19	GI polling period active	N	1	0/1
20	Group 1 polling period	N	4	unsigned
21	Group 1 polling period active	N	1	0/1
22	Group 2 polling period	N	4	unsigned
23	Group 2 polling period active	N	1	0/1
24	Group 3 polling period	N	4	unsigned
25	Group 3 polling period active	N	1	0/1
26	Group 4 polling period	N	4	unsigned
27	Group 4 polling period active	N	1	0/1
28	Group 5 polling period	N	4	unsigned
29	Group 5 polling period active	N	1	0/1
30	Group 6 polling period	N	4	unsigned
31	Group 6 polling period active	N	1	0/1
32	Group 7 polling period	N	4	unsigned
33	Group 7 polling period active	N	1	0/1
34	Group 8 polling period	N	4	unsigned
35	Group 8 polling period active	N	1	0/1
36	Group 9 polling period	N	4	unsigned
37	Group 9 polling period active	N	1	0/1

N	Description	T	Size in bytes	Value
38	Group 10 polling period	N	4	unsigned
39	Group 10 polling period active	N	1	0/1
40	Group 11 polling period	N	4	unsigned
41	Group 11 polling period active	N	1	0/1
42	Group 12 polling period	N	4	unsigned
43	Group 12 polling period active	N	1	0/1
44	Group 13 polling period	N	4	unsigned
45	Group 13 polling period active	N	1	0/1
46	Group 14 polling period	N	4	unsigned
47	Group 14 polling period active	N	1	0/1
48	Group 15 polling period	N	4	unsigned
49	Group 15 polling period active	N	1	0/1
50	Group 16 polling period	N	4	unsigned
51	Group 16 polling period active	N	1	0/1
52	Global counter polling period	N	4	unsigned
53	Global counter polling period active	N	1	0/1
54	Counter group 1 polling period	N	4	unsigned
55	Counter group 1 polling period active	N	1	0/1
56	Counter group 2 polling period	N	4	unsigned
57	Counter group 2 polling period active	N	1	0/1
58	Counter group 3 polling period	N	4	unsigned
59	Counter group 3 polling period active	N	1	0/1
60	Counter group 4 polling period	N	4	unsigned
61	Counter group 4 polling period active	N	1	0/1
62	Clock synchrony	N	4	unsigned
63	Clock synchrony active	N	1	0/1
64	Object origin	N	1	
65	Current version	C	2	

IEC60870-5-104 Standby device description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	M104STBDEV
2	Network alias	C	20	
3	Device alias	C	20	
4	Description	C	80	
5	IP address	C	14	
6	Port	N	2	
7	Originator address	N	2	
8	Time-out of connection establishment (T0)	N	2	seconds
9	Time-out of send or test APDUs (T1)	N	2	seconds
10	Time-out for acknowledges in case of no data message t2>t1 (T2)	N	2	seconds
11	Time-out for sending test frames in case of a long idle state (T3)	N	2	seconds
12	K	N	2	
13	W	N	2	
14	Application layer Time-out	N	2	seconds
15	Activate at start-up 1 = enable.	N	1	0/1
16	Object origin	N	1	
17	Current version	C	2	

Acquisition mode for DNP3 Master

DNP3 configuration description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	MDNP3CONF
2	Binary Input Chatter filter (CF)	N	1	0: No quality changed 1 : NS
3	Binary Output Chatter filter (CF)	N	1	0: No quality changed 1 : NS
4	CROB Default command method	N	1	1: Direct Operate 2: Direct Operate No ACK 3: Select Before Operate
5	Counter rollover (RO)	N	1	0: No quality changed 1: NS
6	Counter discontinuity (DC)	N	1	0: No quality changed 1: NS
7	Analog input over range (OR)	N	1	0: No quality changed 1: NS
8	Analog input reference error (RE)	N	1	0: No quality changed 1: NS
9	Analog output status over range (OR)	N	1	0: No quality changed 1: NS
10	Analog output status reference error (RE)	N	1	0: No quality changed 1: NS
11	AOB Default command method	N	1	1: Direct Operate 2: Direct Operate No ACK 3: Select Before Operate
12	Time tagging	N	1	0: No time tagged 1: Time tagged
13	Current version	C	2	
14	Use local time stamp upon reconnection	N	1	1: Enable 0: Disable

DNP3 network description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	MDNP3NET
2	Network alias	C	20	
3	Description	C	80	
4	Activate at start-up 1 = enable.	N	1	0/1
5	Server list	C	40	
6	Object origin	N	1	
7	Current version	C	2	

DNP3 device description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	MDNP3DEV
2	Network alias	C	20	
3	Device alias	C	20	
4	Description	C	80	
5	IP address	C	14	
6	TCP mode	N	1	0: initating end point 1: dual end point
7	Local link address	N	2	
8	Device link address	N	2	
9	Local port	N	2	
10	Device port	N	2	
11	Link confirmation mode	N	1	0: Never 1: Sometimes 2: Always
12	Link offline polling period	N	2	seconds
13	Application function timeout	N	2	seconds
14	Application enable unsolicited messages	N	1	1: True 0: False
15	TIMESYNC when Need Time IIN	N	1	1: True 0: False
16	INTEGRITY POLL when Local On/Off IIN	N	1	1: True 0-False
17	INTEGRITY POLL when Restart IIN	N	1	1: True 0: False
18	INTEGRITY POLL when Buffer Over Flow IIN	N	1	1: True 0: False
19	INTEGRITY POLL when Online	N	1	1: True 0: False
20	TIME SYNC when Online	N	1	1: True 0: False
21	Integrity polling period	N	2	Milliseconds
22	Interrogation class 0 period	N	2	Milliseconds
23	Interrogation class 1 period	N	2	Milliseconds
24	Interrogation class 2 period	N	2	Milliseconds
25	Interrogation class 3 period	N	2	Milliseconds
26	Time synchronization period	N	2	Milliseconds
27	Activate at start-up	N	1	1: Enable 0: Disable
28	Object origin	N	1	
29	Current version	C	2	

30	Interrogation class 0 enable	N	1	1: Enable 0: Disable
31	Interrogation class 1 enable	N	1	1: Enable 0: Disable
32	Interrogation class 2 enable	N	1	1: Enable 0: Disable
33	Interrogation class 3 enable	N	1	1: Enable 0: Disable
34	Time synchronization enable	N	1	1: Enable 0: Disable
35	Integrity polling enable	N	1	1: Enable 0: Disable
36	Time synchronization type	N	1	1: LAN 0: Serial
37	CLEAR RESTART IIN when Online	N	1	1: True 0: False
38	REFRESH ATTRIBUTES when Online	N	1	1: True 0: False

DNP3 Standby device description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	MDNP3STBDEV
2	Network alias	C	20	
3	Parent Device alias	C	20	
4	Device alias	C	20	
5	Description	C	80	
6	IP address	C	14	
7	TCP mode	N	1	0: initating end point 1: dual end point
8	Local link address	N	2	
9	Device link address	N	2	
10	Local port	N	2	
11	Device port	N	2	
12	Link confirmation mode	N	1	0: Never 1: Sometimes 2: Always
13	Link offline polling period	N	2	seconds
14	Application function timeout	N	2	seconds
15	Application enable unsolicited messages	N	1	1: True 0: False
16	TIMESYNC when Need Time IIN	N	1	1: True 0: False
17	INTEGRITY POLL when Local On/Off IIN	N	1	1: True 0: False

18	INTEGRITY POLL when Restart IIN	N	1	1: True 0: False
19	INTEGRITY POLL when Buffer Over Flow IIN	N	1	1: True 0: False
20	INTEGRITY POLL when Online	N	1	1: True 0: False
21	TIME SYNC when Online	N	1	1: True 0: False
22	Integrity polling period	N	2	Milliseconds
23	Interrogation class 0 period	N	2	Milliseconds
24	Interrogation class 1 period	N	2	Milliseconds
25	Interrogation class 2 period	N	2	Milliseconds
26	Interrogation class 3 period	N	2	Milliseconds
27	Time synchronization period	N	2	Milliseconds
28	Activate at start-up	N	1	1: Enable 0: Disable
29	Object origin	N	1	
30	Current version	C	2	
31	Interrogation class 0 enable	N	1	1: Enable 0: Disable
32	Interrogation class 1 enable	N	1	1: Enable 0: Disable
33	Interrogation class 2 enable	N	1	1: Enable 0: Disable
34	Interrogation class 3 enable	N	1	1: Enable 0: Disable
35	Time synchronization enable	N	1	1: Enable 0: Disable
36	Integrity polling enable	N	1	1: Enable 0: Disable
37	RESERVED			
38	RESERVED			
39	Time synchronization type	N	1	1: LAN 0: Serial
40	CLEAR RESTART IIN when Online	N	1	1: True 0: False
41	REFRESH ATTRIBUTES when Online	N	1	1: True 0: False

Acquisition mode for SNMP

SNMP configuration description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	SNMPCONF
2	Maximum number of concurrent requests	N	2	Range from 1 to 500
3	Convert TimeTick values to milliseconds	N	1	0: convert off 1 : convert on
4	Use numerical OID in variable configuration	N	1	0: Symbolic OID is used 1: Numerical OID is used
5	Enable online OIDs browsing	N	1	0: OIDs browsing disabled 1: OIDs browsing enabled
6	Maximum number of port displayed	N	1	Range from 1 to 100

SNMP network description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	SNMPNET
2	Network alias	C	30	
3	Description	C	80	
4	Activate at start-up	N	1	0: not activated 1: activated
5	Server list	C	40	
6	Object origin	N	1	
7	Reserved	N	1	
8	Trap / Inform port	N	2	
9	Device default property – Number of retries	N	1	Range from 1 to 10
10	Device default property – Time out	N	2	
11	Device default property – Snmp port	N	2	
12	Device default property – Number of OIDs per request	N	2	Range from 1 to 100
13	Device default property – Community	C	40	
14	Device default property – V3 User name	C	40	
15	Reserved	N		
16	Device default property – V3 Authentication type	N		0: MD5 1: SHA1
17	Device default property – V3 authentication key	C	40	
18	Device default property – V3 Privacy type	N		0: DES 1: AES
19	Device default property – V3 Privacy key	C	40	

SNMP polling group description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	SNMPGRP
2	Polling group alias	C	40	
3	Description	C	80	
4	Activate at start-up	N	1	0: not activated 1: activated
5	Object origin	N	1	
6	Reserved			
6	Polling period in ms	N	1	Range from 1000 to 8450000

SNMP device description

N	Description	T	Size in bytes	Value
1	Description identifier	C	8	SNMPDEV
2	Device alias	C	200	
3	Description	C	80	
4	Activate at start-up	N	1	0: not activated 1 : activated
6	Object origin	N	1	
7	Reserved			
8	SNMP Version	N	1	0: unmanaged device 1: Version1 2: Version2 3: Version3
9	V3 level	N	1	0: NoAutNoPriv 1: AutNoPriv 2: AutPriv
10	Address type	N	1	0: IP address 1: Host name
11	Host name	C	40	
12	IP address	C	40	Format x.x.x.x
13	Override default number of retries	N	1	0: Use network default value 1: Use device value
14	Device Number of retries	N	1	Range from 1 to 10
15	Override default time out	N	1	0: Use network default value 1: Use device value
16	Device Time out	N	2	Range from 1 to 10
17	Override default port number	N	1	0: Use network default value 1: Use device value
18	Device Snmp port	N	2	Range from 1 to 65535
19	Override default number of OIDs per request	N	1	0: Use network default value 1: Use device value
20	Device Number of OIDs per request	N	2	Range from 1 to 100
21	Override default community	N	1	0: Use network default value 1: Use device value
22	Device community	C	40	
23	Override default V3 user name	N	1	0: Use network default value 1: Use device value
24	Device V3 User name	C	40	
25	Reserved			
26	Reserved			
27	Override default V3 Authentication type	N	1	0: Use network default value 1: Use device value

28	Device V3 Authentication type	N		0: MD5 1: SHA1
29	Override default V3 authentication key	N	1	0: Use network default value 1: Use device value
30	Device V3 authentication key	C	40	
31	Override default V3 Privacy type	N	1	0: Use network default value 1: Use device value
32	Device V3 Privacy type	N	1	0: DES 1: AES
33	Override default V3 Privacy key	N	1	0: Use network default value 1: Use device value

Associated labels

Bit associated label configuration

N	Description	T	Size in bytes	Value
1	Entry Type: bit associated label	C	9	BITALABEL
2	Name	C	255	
3	Description	C	255	
4	Object origin	N	2	0/-1
5	Object version	N	2	2
6	Label for value 0 in language 1	C	255	
7	Label for value 0 in language 2	C	255	
8	Label for value 1 in language 1	C	255	
9	Label for value 1 in language 2	C	255	
10	Label for change to 0 in language 1	C	255	
11	Label for change to 0 in language 2	C	255	
12	Label for change to 1 in language 1	C	255	
13	Label for change to 1 in language 2	C	255	
14	Label for command to 0 in language 1	C	255	
15	Label for command to 0 in language 2	C	255	
16	Label for command to 1 in language 1	C	255	
17	Label for command to 1 in language 2	C	255	
18	Label for unavailable in language 1	C	255	

19	Label for unavailable in language 2	C	255	

Alarm associated label configuration

N	Description	T	Size in bytes	Value
1	Entry Type: alarm associated label	C	9	ALMALABEL
2	Name	C	255	
3	Description	C	255	
4	Object origin	N	2	0/-1
5	Object version	N	2	1
6	Label for alarm on - not acknowledgement in language 1	C	255	
7	Label for alarm on - not acknowledgement in language 2	C	255	
8	Label for alarm on - acknowledgement in language 1	C	255	
9	Label for alarm on - acknowledgement in language 2	C	255	
10	Label for alarm off - not acknowledgement in language 1	C	255	
11	Label for alarm off - not acknowledgement in language 2	C	255	
12	Label for alarm off in language 1	C	255	
13	Label for alarm off in language 2	C	255	
14	Label for alarm unavailable in language 1	C	255	
15	Label for alarm unavailable in language 2	C	255	
16	Label for user acknowledgement in language 1	C	255	

17	Label for user acknowledgement in language 2	C	255	
18	Label for command to 0 in language 1	C	255	
19	Label for command to 0 in language 2	C	255	
20	Label for command to 1 in language 1	C	255	
21	Label for command to 1 in language 2	C	255	
22	Label for alarm inhibited in language 1	C	255	
23	Label for alarm inhibited in language 2	C	255	
24	Label for alarm not accessible in language 1	C	255	
25	Label for alarm not accessible in language 2	C	255	
26	Label for alarm masked by operator in language 1	C	255	
27	Label for alarm masked by operator in language 2	C	255	
28	Label for alarm masked by program in language 1	C	255	
29	Label for alarm masked by program in language 2	C	255	
30	Label for alarm masked by variable in language 1	C	255	
31	Label for alarm masked by variable in language 2	C	255	
32	Label for alarm masked by expression in language 1	C	255	
33	Label for alarm masked by expression in language 2	C	255	

Enumeration label configuration

N	Description	T	Size in bytes	Value
1	Entry Type: enumeration label	C	10	ENUMALABEL
2	Label name	C	255	
3	Description	C	255	
4	Object origin	N	2	0/-1
5	Object version	N	2	1
6	Label for default value in language 1	C	255	
7	Label for default value in language 2	C	255	
8	Label for default command to in language 1	C	255	
9	Label for default command to in language 2	C	255	
10	Label for default change to in language 1	C	255	
11	Label for default change to in language 2	C	255	
12	Label for unavailable value in language 1	C	255	
13	Label for unavailable value in language 2	C	255	
14	Label for unavailable command to in language 1	C	255	
15	Label for unavailable command to in language 2	C	255	
16	Label for unavailable change to in language 1	C	255	
17	Label for unavailable change to in language 2	C	255	

Enumeration label item configuration

N	Description	T	Size in bytes	Value

1	Entry Type: enumeration label item	C	14	ENUMALABEL ITEM
2	Label name	C	255	
3	Label item name	C	255	
4	Object origin	N	2	0/-1
5	Object version	N	2	1
6	Enumeration value	C	255	
7	Item Order	N	2	
8	Label for value in language 1	C	255	
9	Label for value in language 2	C	255	
10	Label for command to in language 1	C	255	
11	Label for command to in language 2	C	255	
12	Label for change to in language 1	C	255	
13	Label for change to in language 2	C	255	

Default/standard associated labels

Default/standard bit associated label configuration

N	Description	T	Size in bytes	Value
1	Entry Type: default/standard bit associated label	C	12	DEFBITALABEL
2	Name	C	255	
3	Description	C	255	
4	Object origin	N	2	0/-1
5	Object version	N	2	2
6	Standard label for value 0 in language 1	C	255	Animation 0
7	Standard label for value 0 in language 2	C	255	Animation 0
8	Standard label for value 1 in language 1	C	255	Animation 1
9	Standard label for value 1 in language 2	C	255	Animation 1
10	Standard label for change to 0 in language 1	C	255	Log change to 0

11	Standard label for change to 0 in language 2	C	255	Log change to 0
12	Standard label for change to 1 in language 1	C	255	Log change to 1
13	Standard label for change to 1 in language 2	C	255	Log change to 1
14	Standard label for command to 0 in language 1	C	255	Command 0
15	Standard label for command to 0 in language 2	C	255	Command 0
16	Standard label for command to 1 in language 1	C	255	Command 1
17	Standard label for command to 1 in language 2	C	255	Command 1
18	Standard label for unavailable in language 1	C	255	Bit unavailable
19	Standard label for unavailable in language 2	C	255	Bit unavailable

Default/standard alarm associated label configuration

N	Description	T	Size in bytes	Value
1	Entry Type: default/standard alarm associated label	C	12	DEFALMALABEL
2	Name	C	255	
3	Description	C	255	
4	Object origin	N	2	0/-1
5	Object version	N	2	1
6	Standard label for alarm on - not acknowledgement in language 1	C	255	Alarm on – not ack.

7	Standard label for alarm on - not acknowledgement in language 2	C	255	Alarm on – not ack.
8	Standard label for alarm on - acknowledgement in language 1	C	255	Alarm on - ack.
9	Standard label for alarm on - acknowledgement in language 2	C	255	Alarm on - ack.
10	Standard label for alarm off - not acknowledgement in language 1	C	255	Alarm off - not ack.
11	Standard label for alarm off - not acknowledgement in language 2	C	255	Alarm off - not ack.
12	Standard label for alarm off in language 1	C	255	Alarm off
13	Standard label for alarm off in language 2	C	255	Alarm off
14	Standard label for alarm unavailable in language 1	C	255	Alarm unavailable
15	Standard label for alarm unavailable in language 2	C	255	Alarm unavailable
16	Standard label for user acknowledgement in language 1	C	255	User acknowledgement
17	Standard label for user acknowledgement in language 2	C	255	User acknowledgement
18	Standard label for command to 0 in language 1	C	255	Bit send 0
19	Standard label for command to 0 in language 2	C	255	Bit send 0
20	Standard label for command to 1 in language 1	C	255	Bit send 1
21	Standard label for command to 1 in language 2	C	255	Bit send 1
22	Standard label for alarm inhibited in language 1	C	255	Alarm inhibited

23	Standard label for alarm inhibited in language 2	C	255	Alarm inhibited
24	Standard label for alarm not accessible in language 1	C	255	Alarm not accessible
25	Standard label for alarm not accessible in language 2	C	255	Alarm not accessible
26	Standard label for alarm masked by operator in language 1	C	255	Alarm operator masked
27	Standard label for alarm masked by operator in language 2	C	255	Alarm operator masked
28	Standard label for alarm masked by program in language 1	C	255	Alarm program masked
29	Standard label for alarm masked by program in language 2	C	255	Alarm program masked
30	Standard label for alarm masked by variable in language 1	C	255	Alarm variable masked
31	Standard label for alarm masked by variable in language 2	C	255	Alarm variable masked
32	Standard label for alarm masked by expression in language 1	C	255	Alarm expression masked
33	Standard label for alarm masked by expression in language 2	C	255	Alarm expression masked
34	Standard label for User masking in language 1	C	255	Masking
35	Standard label for User masking in language 2	C	255	Masking
36	Standard label for User unmasking in language 1	C	255	Unmasking
37	Standard label for User unmask action in language 2	C	255	Unmasking
38	Standard label for Begin maintenance in language 1	C	255	Begin maintenance

39	Standard label for `Begin maintenance` in language 2	C	255	`Begin maintenance`
40	Standard label for `End maintenance` in language 1	C	255	`End maintenance`
41	Standard label for `End maintenance` in language 2	C	255	`End maintenance`
42	Standard label for `User Actions alarm on` in language 1	C	255	`Alarm on (only in file)`
43	Standard label for `User Actions alarm on` in language 2	C	255	`Alarm on (only in file)`
44	Standard label for `User Actions alarm off` in language 1	C	255	`Alarm off (only in file)`
45	Standard label for `User Actions alarm off` in language 2	C	255	`Alarm off (only in file)`

Default/standard user action associated label configuration

N	Description	T	Size in bytes	Value
1	Entry Type: default/standard user action associated label	C	12	DEFACTALABEL
2	Name	C	255	
3	Description	C	255	
4	Object origin	N	2	0/-1
5	Object version	N	2	1
6	Standard label for `Logon` in language 1	C	255	`Logon`
7	Standard label for `Logon` in language 2	C	255	`Logon`
8	Standard label for `Logoff` in language 1	C	255	`Logoff`
9	Standard label for `Logoff` in language 2	C	255	`Logoff`
10	Standard label for `Attempted logon failed` in language 1	C	255	`Attempted logon failed`

11	Standard label for `Attempted logon failed` in language 2	C	255	Attempted logon failed
12	Standard label for `Bit command` in language 1	C	255	Command (only in file)
13	Standard label for `Bit command` in language 2	C	255	Command (only in file)
14	Standard label for `Register command` in language 1	C	255	Command
15	Standard label for `Register command` in language 2	C	255	Command
16	Standard label for `Text command` in language 1	C	255	Command
17	Standard label for `Text command` in language 2	C	255	Command
18	Standard label for `Send recipe` in language 1	C	255	Send recipe
19	Standard label for `Send recipe` in language 2	C	255	Send recipe
20	Standard label for `Execute program` in language 1	C	255	Execute program
21	Standard label for `Execute program` in language 2	C	255	Execute program
22	Standard label for `Alarm off` in language 1	C	255	Alarm off
23	Standard label for `Alarm off` in language 2	C	255	Alarm off
24	Standard label for `User mask action` in language 1	C	255	User mask action
25	Standard label for `User mask action` in language 2	C	255	User mask action
26	Standard label for `User unmask action` in language 1	C	255	User unmask action
27	Standard label for `User unmask action` in language 2	C	255	User unmask action

28	Standard label for `Begin maintenance` in language 1	C	255	`Begin maintenance`
29	Standard label for `Begin maintenance` in language 2	C	255	`Begin maintenance`
30	Standard label for `End maintenance` in language 1	C	255	`End maintenance`
31	Standard label for `End maintenance` in language 2	C	255	`End maintenance`
32	Standard label for `Attempted logon failure` in language 1	C	255	`Attempted logon failure`
33	Standard label for `Attempted logon failure` in language 2	C	255	`Attempted logon failure`

Domains configuration

N	Description	T	Size in bytes	Value
1	Entry Type: Domain	C	3	DOM
2	Name	C	100	
3	Description	C	255	
4	Reserved			
5	Reserved			
6	Object origin	N	2	0/-1
7	Object version	N	2	0

Natures configuration

N	Description	T	Size in bytes	Value
1	Entry Type: Nature	C	3	NAT
2	Name	C	100	
3	Description	C	255	
4	Reserved			
5	Reserved			
6	Object origin	N	2	0/-1
7	Object version	N	2	0