Version V1.3.18.317020 Release date 2016-09-07

DP

Vendor ID	310 / 0x0136 - Bytes: 01 54 / 0x01 0x36
Device ID	610 / 0x000262 - Bytes: 00 02 98 / 0x00 0x02 0x62
Vendor name	ifm electronic gmbh
Vendor text	www.ifm.com
Vendor URL	http://www.ifm.com/ifmgb/web/io-link-download.htm

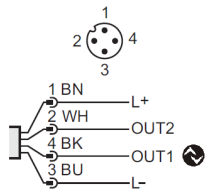
Communication

IO-Link revision	V1.1
Bit rate	COM2
Minimum cycle time	3.200 ms
SIO mode supported	Yes

Features

Block parametrization	Yes
Data storage	Yes

Device variant

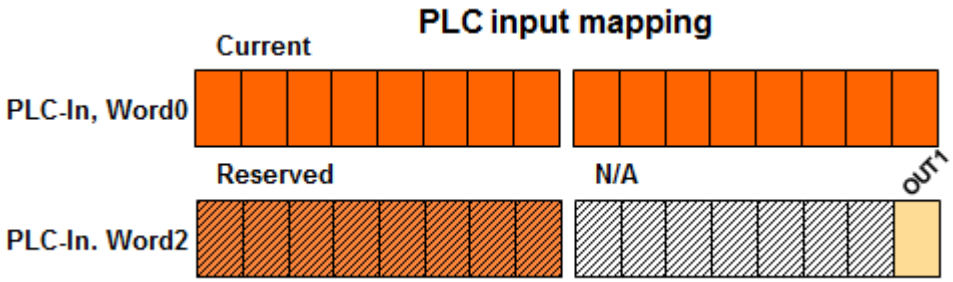
DP2200	Analog Threshold Displ./4-20mA		

Process data

Total bit length = 32

(Process data input)

Name	Description	Data type	Bit offset	Bit length	Value range	Gradient	Offset	Unit
Current	Actual current value	IntegerT	16	16	**3600 to 21000** (32764) NoData (-32760) UL (32760) OL	0.001	0	mA
OUT1	Status depends on [OU1]	BooleanT	0		(false) inactive (true) active			



Variables

Name	Description	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
Standard Command		**2**	**Sub 0**	**UIntegerT**	**8 Bit**	**wo**		(130) Restore Factory Settings (161) Reset [Hi] and [Lo] memory (162) Reset [Lo] memory (163) Reset [Hi] memory (240) IO-Link 1.1 system test command 240, Event 8DFE appears (241) IO-Link 1.1 system test command 241, Event 8DFE disappears (242) IO-Link 1.1 system test command 242, Event 8DFF appears (243) IO-Link 1.1 system test command 243, Event 8DFF disappears (255) Command without effect, for internal use only			
Device Access Locks		**12**	**Sub 0**	**RecordT**	**16 Bit**	**rw**					
Data Storage			bitOffs 1	BooleanT	1 Bit		(false)	(false) Unlocked (true) Locked			
Local User Interface			bitOffs 3	BooleanT	1 Bit		(false)	(false) Unlocked			

Variables

Name	Description	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
Device Access Locks		**12**	**Sub 0**	**RecordT**	**16 Bit**	**rw**					
								(true) Locked			
Vendor Name		**16**	**Sub 0**	**StringT**	**max 19 Byte**	**ro**	**ifm electronic gmbh**				
Vendor Text		**17**	**Sub 0**	**StringT**	**max 11 Byte**	**ro**	**www.ifm.com**				
Product Name		**18**	**Sub 0**	**StringT**	**max 6 Byte**	**ro**	**DP2200**				
Product ID		**19**	**Sub 0**	**StringT**	**max 6 Byte**	**ro**	**DP2200**				
Product Text		**20**	**Sub 0**	**StringT**	**max 30 Byte**	**ro**	**Analog Threshold Displ./4-20mA**				
Serial Number		**21**	**Sub 0**	**StringT**	**max 12 Byte**	**ro**					
Hardware Version		**22**	**Sub 0**	**StringT**	**max 2 Byte**	**ro**					
Firmware Version		**23**	**Sub 0**	**StringT**	**max 5 Byte**	**ro**					
Application Specific Tag		**24**	**Sub 0**	**StringT**	**max 32 Byte**	**rw**	*******				
Device Status		**36**	**Sub 0**	**UIntegerT**	**8 Bit**	**ro**	**(0) Device is OK**	(0) Device is OK (1) Maintenance required (2) Out of specification (3) Functional check			

Variables

Name	Description	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
Device Status		**36**	**Sub 0**	**UIntegerT**	**8 Bit**	**ro**	**(0) Device is OK**	(4) Failure 5 to 255 (Reserved)			
Detailed Device Status		**37**	**Sub 0**		**21 Byte**	**ro**	**00 00 00 h**				
dAP	**Damping of the measured signal**	**510**	**Sub 0**	**UIntegerT**	**16 Bit**	**rw**	**60**	**0 to 4000**	**0.001**	**0**	**s**
BitCoded_ActiveEvents	**Bit mask for current pending events**	**545**	**Sub 0**	**RecordT**	**32 Bit**	**ro**					
Bit_31	Bit 31 indicates the assigned pending event		bitOffs 31	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x8DFF			
Bit_30	Bit 30 indicates the assigned pending event		bitOffs 30	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x8DFE			
Bit_10	Bit 10 indicates the assigned pending event		bitOffs 10	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x8CBA			
Bit_9	Bit 9 indicates the assigned pending event		bitOffs 9	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x8C30			
Bit_8	Bit 8 indicates the assigned pending event		bitOffs 8	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x8C10			
Bit_1	Bit 1 indicates the assigned pending event		bitOffs 1	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x6320			
Bit_0	Bit 0 indicates the assigned pending event		bitOffs 0	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x5000			
ParaConfigFaultCollection	**Displays the wrongly set parameters**	**546**	**Sub 0**			**ro**	**0**				
Loc	**[Loc] locks the local user interface to prevent unintentional changes, [Loc] is resettable at the device**	**550**	**Sub 0**	**UIntegerT**	**8 Bit**	**rw**	**(1) uLoc**	(0) Loc			

Variables

Name	Description	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
Loc	**[Loc] locks the local user interface to prevent unintentional changes, [Loc] is resettable at the device**	**550**	**Sub 0**	**UIntegerT**	**8 Bit**	**rw**	**(1) uLoc**	(1) uLoc			
diS	**Display settings**	**552**	**Sub 0**	**RecordT**	**16 Bit**	**rw**					
Display On / OFF			bitOffs 7	BooleanT	1 Bit		(false) On	(false) On (true) OFF			
Update rate			bitOffs 0	UIntegerT	6 Bit		(2) d2 / medium	(1) d1 / fast (2) d2 / medium (4) d3 / slow			
coLr	**Assignment of the display colours 'red' and 'green' within the measuring range**	**554**	**Sub 0**	**UIntegerT**	**8 Bit**	**rw**	**(2) rEd / Display colour red (independent of the measured value)**	(2) rEd / Display colour red (independent of the measured value) (3) GrEn / Display colour green (independent of the measured value) (4) r1ou / Display colour red when OUT1 switches (5) G1ou / Display colour green when OUT1 switches (10) r-cF / Display colour red when the measured value is			

Variables

Name	Description	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
coLr	**Assignment of the display colours 'red' and 'green' within the measuring range**	**554**	**Sub 0**	**UIntegerT**	**8 Bit**	**rw**	**(2) rEd / Display colour red (independent of the measured value)**	between the freely definable limit values [cFL] and [cFH] (11) G-cF / Display colour green when the measured value is between the freely definable limit values [cFL] and [cFH]			
cFL	**Lower value for colour change. Parameter only active after selection of a freely definable colour window in the coLr parameter: [r-cF] or [G-cF]. The setting range corresponds to the measuring range and its maximum limit is [cFH]**	**555**	**Sub 0**	**IntegerT**	**16 Bit**	**rw**	**4000**	**4000 to 19900**	**0.001**	**0**	**mA**
cFH	**Upper value for colour change. Parameter only active after selection of a freely definable colour window in the coLr parameter: [r-cF] or [G-cF]. The setting range corresponds to the measuring range and its minimum limit is [cFL]**	**556**	**Sub 0**	**IntegerT**	**16 Bit**	**rw**	**20000**	**4100 to 20000**	**0.001**	**0**	**mA**
Hi	**Maximum memory value**	**560**	**Sub 0**	**IntegerT**	**16 Bit**	**ro**	**()**	**3600 to 21000**	**0.001**	**0**	**mA**

Variables

Name	Description	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
Hi	**Maximum memory value**	**560**	**Sub 0**	**IntegerT**	**16 Bit**	**ro**	**()**	(32764) NoData (-32760) UL (32760) OL	**0.001**	**0**	**mA**
Lo	**Minimum memory value**	**561**	**Sub 0**	**IntegerT**	**16 Bit**	**ro**	**()**	**3600 to 21000** (32764) NoData (-32760) UL (32760) OL	**0.001**	**0**	**mA**
ou1	**Output configuration [OUT 1]**	**580**	**Sub 0**	**UIntegerT**	**8 Bit**	**rw**	**(3) Hno / Hysteresis fct normally open**	(3) Hno / Hysteresis fct normally open (4) Hnc / Hysteresis fct normally closed (5) Fno / Window fct normally open (6) Fnc / Window fct normally closed			
dS1	**Switching delay for [OUT 1]**	**581**	**Sub 0**	**UIntegerT**	**16 Bit**	**rw**	**0**	**0 to 500**	**0.1**	**0**	**s**
dr1	**Reset delay for [OUT 1]**	**582**	**Sub 0**	**UIntegerT**	**16 Bit**	**rw**	**0**	**0 to 500**	**0.1**	**0**	**s**
SP_FH1	**Switch point 1, [SP1] must be greater than [rP1]. Please take into account the current [rP1] value. [SP1] will be refused if below [rP1]. [SP] = [FH] and [rP] = [FL] if [OU1] = Fno, Fnc**	**583**	**Sub 0**	**IntegerT**	**16 Bit**	**rw**	**6000**	**4100 to 20000**	**0.001**	**0**	**mA**

Variables

Name	Description	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
rP_FL1	**Reset point 1, [rP1] must be smaller than [SP1]. Please take into account the current [SP1] value.I[rP1] will be refused if above [SP1]. [rP] = [FL] and [SP] = [FH] if [OU1] = Fno, Fnc**	**584**	**Sub 0**	**IntegerT**	**16 Bit**	**rw**	**5000**	**4000 to 19900**	**0.001**	**0**	**mA**
ScAL	**Setting of the decimal point**	**900**	**Sub 0**	**UIntegerT**	**8 Bit**	**rw**	**(0) OFF**	(0) OFF (1) cccc (2) ccc.c (3) cc.cc (4) c.ccc			
A.Trm	**Activation of the internal termination of the measurement current circuit. If OUT2 is not connected, this internal terminating resistor should be activated**	**901**	**Sub 0**	**UIntegerT**	**8 Bit**	**rw**	**(1) On**	(0) OFF (1) On			
C.ASP	**Customer-specific start point. This value is assigned to the lower value of the analogue input. The parameter is only active if ScAL is not set to [OFF]**	**910**	**Sub 0**	**IntegerT**	**16 Bit**	**rw**	**400**	**-746 to 9745**	**1**	**0**	
C.AEP	**Customer-specific end point. This value is assigned to the upper value of the analogue input. The parameter is only**	**911**	**Sub 0**	**IntegerT**	**16 Bit**	**rw**	**2000**	**-366 to 9366**	**1**	**0**	

Variables

Name	Description	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
	active if ScAL is not set to [OFF]										
C.uni	**Customer-specific unit with max. 4 characters. Function available only via IO-Link.**	**922**	**Sub 0**	**StringT**	**4**	**rw**	**mA**				

Events

Code	Name	Type	Description
20480 d / 50 00 h	Device hardware fault	Error	Device Exchange
25376 d / 63 20 h	Parameter error	Error	Check data sheet and values
35856 d / 8C 10 h	Process variable range over-run	Warning	Process data uncertain. Note: This Event will not be transmitted via IO-Link Event mechanism. It is only available by reading Index 37 (DetailedDeviceStatus) oder 545 (BitCoded_ActiveEvents)
35888 d / 8C 30 h	Process variable range under-run	Warning	Process data uncertain. Note: This Event will not be transmitted via IO-Link Event mechanism. It is only available by reading Index 37 (DetailedDeviceStatus) oder 545 (BitCoded_ActiveEvents)
36026 d / 8C BA h	Probe dropped	Error	Solve problem
36350 d / 8D FE h	Test Event 1	Warning	Event appears by setting index 2 to value 240, Event disappears by setting index 2 to value 241
36351 d / 8D FF h	Test Event 2	Warning	Event appears by setting index 2 to value 242, Event disappears by setting index 2 to value 243

Error types

Error code	Name	Description
32768 d / 80 00 h	Device application error - no details	Service has been refused by the device application and no detailed information of the incident is available
32785 d / 80 11 h	Index not available	Access occurs to a not existing index
32786 d / 80 12 h	Subindex not available	Access occurs to a not existing subindex
32800 d / 80 20 h	Service temporarily not available	Parameter is not accessible due to the current state of the device application
32803 d / 80 23 h	Access denied	Write access on a read-only parameter
32816 d / 80 30 h	Parameter value out of range	Written parameter value is outside its permitted value range

Error types

Error code	Name	Description
32819 d / 80 33 h	Parameter length overrun	Written parameter length is above its predefined length
32820 d / 80 34 h	Parameter length underrun	Written parameter length is below its predefined length
32821 d / 80 35 h	Function not available	Written command is not supported by the device application
32822 d / 80 36 h	Function temporarily unavailable	Written command is not available due to the current state of the device application
32832 d / 80 40 h	Invalid parameter set	Written single parameter collides with other actual parameter settings
32833 d / 80 41 h	Inconsistent parameter set	Parameter inconsistencies were found at the end of block parameter transfer, device plausibility check failed
32898 d / 80 82 h	Application not ready	Read or write service is refused due to a temporarily unavailable application