Version V1.3.14.6 Release date 2018-03-14

Copyright 2018, Builder: 4.0.0.0, Time: 04:49:42

OGD

Vendor ID	310 / 0x0136 - Bytes: 01 54 / 0x01 0x36
Device ID	1012 / 0x0003F4 - Bytes: 00 03 244 / 0x00 0x03 0xF4
Vendor name	ifm electronic gmbh
Vendor text	www.ifm.com
Vendor URL	http://www.ifm.com/ifmgb/web/io-link-download.htm

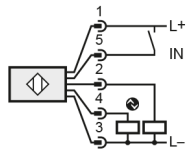
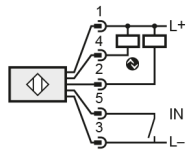
Communication

IO-Link revision	V1.1
Bit rate	COM2
Minimum cycle time	5.000 ms
SIO mode supported	Yes

Features

Block parametrization	Yes
Data storage	Yes

Device variant

OGD592	Photoelectric sensor, 25...300 mm, PnP		
OGD593	Photoelectric sensor, 25...300 mm, nPn		

Process data

Total bit length = 64

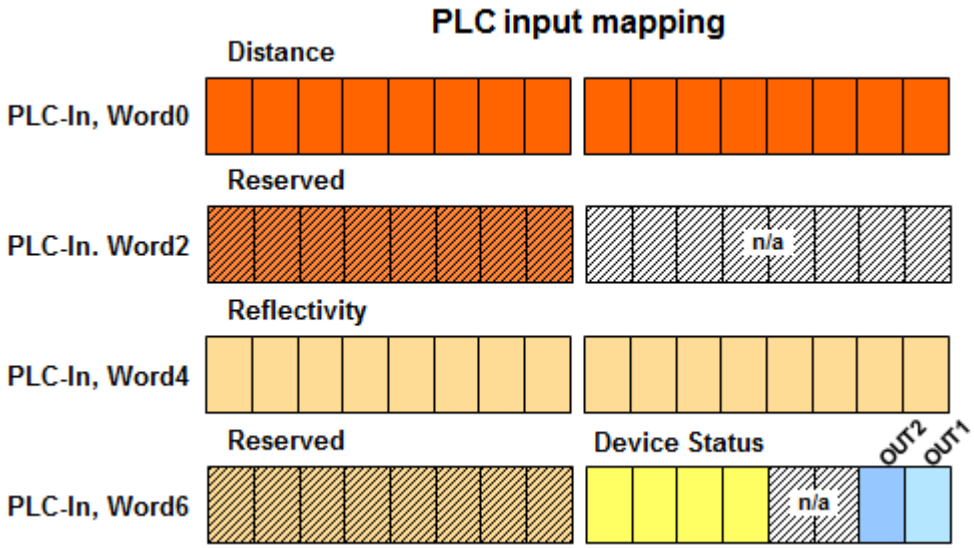
(Process data input)

Name	Description	Data type	Bit length	Value range	Gradient	Offset	Unit
Distance	Current object distance	IntegerT	16	**25 to 330** (-32760) UL (32760) OL (32764) NoData	1	0	mm
Reflectivity	Current object reflectivity	IntegerT	16	**1 to 100** (-32760) UL (32760) OL (32764) NoData	1	0	%
Device status	Current device status, a copy of the variable [Device Status] in the process data channel	UIntegerT	4	(0) Device is OK (1) Maintenance required (2) Out of specification (3) Functional check (4) Failure			
OUT2	Status depends on [OU2]	BooleanT		(false) inactive (true) active			
OUT1	Status depends on [OU1]	BooleanT		(false) inactive (true) active			

Process data Total bit length = 64

(Process data input)

Name	Description	Data type	Bit length	Value range	Gradient	Offset	Unit



Variables

Name	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 (195) Background Teach -> SP1 (196) Background Teach -> SP2 (208) Teach F_SP1 (209) Teach N_SP1 (210) Teach F_SP2 (211) Teach N_SP2 (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			
Device Access Locks										
	12	Sub 0	RecordT	16 Bit	rw					
Data Storage		bitOffs 1	BooleanT	1 Bit		(false)	(false) Unlocked (true) Locked			
Local Parameterization		bitOffs 2	BooleanT	1 Bit		(false)	(false) Unlocked (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				

Variables

Name	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
Product Name										
	18	Sub 0	StringT	max 6 Byte	ro					
Product ID										
	19	Sub 0	StringT	max 6 Byte	ro					
Product Text										
	20	Sub 0	StringT	max 12 Byte	ro	Laser Sensor				
Serial Number										
	21	Sub 0	StringT	max 12 Byte	ro					
Hardware Version										
	22	Sub 0	StringT	max 8 Byte	ro					
Firmware Version										
	23	Sub 0	StringT	max 8 Byte	ro					
Application Specific Tag										
	24	Sub 0	StringT	max 32 Byte	rw	***				

Variables

Name	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	(0) Device is OK (1) Maintenance required (2) Out of specification (3) Functional check (4) Failure 5 to 255 (Reserved)			
Detailed Device Status										
	37	Sub 0	ArrayT	24 Byte	ro	00 00 00 h				
dS1	**Switchching signal channel 1, Switch-On delay**									
	370	Sub 0	UIntegerT	16 Bit	rw	0	0 to 5000	0.001	0	s
dr1	**Switchching signal channel 1, Switch-Off delay**									
	371	Sub 0	UIntegerT	16 Bit	rw	0	0 to 5000	0.001	0	s
dS2	**Switchching signal channel 2, Switch-On delay**									
	372	Sub 0	UIntegerT	16 Bit	rw	0	0 to 5000	0.001	0	s
dr2	**Switchching signal channel 2, Switch-Off delay**									
	373	Sub 0	UIntegerT	16 Bit	rw	0	0 to 5000	0.001	0	s
dFo	**Delay time of outputs after fault**									
	530	Sub 0	UIntegerT	16 Bit	rw	100	0 to 5000	0.001	0	s
Power cycles	**Number of power cycles since delivery**									
	541	Sub 0	IntegerT	32 Bit	ro	0	0 to 2147483647	1	0	
Operating hours	**Counter of the operating hours since delivery**									
	542	Sub 0	IntegerT	32 Bit	ro	0	0 to 2147483647	1	0	h

Variables

Name	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
Active Events	**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_20, *Bit 20 indicates the assigned pending event*		bitOffs 20	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x8CA4			
Bit_19, *Bit 19 indicates the assigned pending event*		bitOffs 19	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x8CD9			
Bit_18, *Bit 18 indicates the assigned pending event*		bitOffs 18	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x8CD8			
Bit_17, *Bit 17 indicates the assigned pending event*		bitOffs 17	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x8CB1			
Bit_16, *Bit 16 indicates the assigned pending event*		bitOffs 16	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x8CB0			
Bit_11, *Bit 11 indicates the assigned pending event*		bitOffs 11	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x4220			
Bit_10, *Bit 10 indicates the assigned pending event*		bitOffs 10	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x4210			
Bit_2, *Bit 2 indicates the assigned pending event*		bitOffs 2	BooleanT	1 Bit		(0) noEv	(0) noEv (1) 0x7710			

Variables

Name	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit

Variables

Name	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
Param configuration fault	**Displays the wrongly set parameters**									
	546	Sub 0	ArrayT	10 * 32 Bit	ro	0	(0) OK (24248320) SSC1_dS (24313856) SSC1_dr (24379392) SSC2_dS (24444928) SSC2_dr (34734080) dFo (35454976) Number_Of_Powercycles (35520512) Operating_Hours (36044800) Loc (36110336) uni (38010880) ou1 (38207488) SP1 (38666240) ou2 (38862848) SP2 (52559872) diS.B (131072000) Transmitter_Configuration (131596288) Repr_ro (131727360) F_SP1 (131792896) N_SP1 (132382720) F_SP2 (132448256) N_SP2 (35717120) BitCoded_ActiveEvents (35717121) BitCoded_ActiveEvents.Bit_2 (35717122) BitCoded_ActiveEvents.Bit_10 (35717123)			

Variables

Name	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
							BitCoded_ActiveEvents.Bit_11 (35717124) BitCoded_ActiveEvents.Bit_16 (35717125) BitCoded_ActiveEvents.Bit_17 (35717126) BitCoded_ActiveEvents.Bit_18 (35717127) BitCoded_ActiveEvents.Bit_19 (35717128) BitCoded_ActiveEvents.Bit_20 (35717129) BitCoded_ActiveEvents.Bit_30 (35717130) BitCoded_ActiveEvents.Bit_31 (35782656) ParaConfigFaultCollection			
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 (1) uLoc			
Uni	**Selection of the physical unit**									
	551	Sub 0	UIntegerT	8 Bit	rw	(0) mm	(0) mm (1) in			

Variables

Name	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
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 (16) Off / Output Off			
SP1	**Switch point out 1**									
	583	Sub 0	IntegerT	16 Bit	rw	300	30 to 300	1	0	mm
OU2	**Output configuration [OUT 2]**									
	590	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 (16) Off / Output Off			
SP2	**Switch point out 2**									
	593	Sub 0	IntegerT	16 Bit	rw	30	30 to 300	1	0	mm
diS.B	**Current display brightness**									
	802	Sub 0	UIntegerT	8 Bit	rw	(1) On	(0) OFF (1) On			

Variables

Name	Index	Subindex	Data type	Length	Access rights	Default	Value range	Gradient	Offset	Unit
Transmitter configuration	**Configuration transmitter light**									
	2000	Sub 0	UIntegerT	8 Bit	rw	(2) OFF_ExtActive / Off by external signal active	(0) Off / Off (1) On / On (2) OFF_ExtActive / Off by external signal active (3) On_ExtActive / On by external signal active			
rEPr	**Repeatability. If the measuring situation does not change, the measured value (PDV or analog output) will remain with high propability within this deviation range.**									
	2008	Sub 0	UIntegerT	16 Bit	ro		0 to 330	1	0	mm
FSP1	**Switch point 'far' 1, [FSP1] must be greater than [nSP1]. Please take into account the current [nSP1] value. [FSP1] will be refused if below [nSP1].**									
	2010	Sub 0	IntegerT	16 Bit	rw	110	30 to 300	1	0	mm
nSP1	**Switch point 'near' 1, [nSP1] must be smaller than [FSP11]. Please take into account the current [FSP1] value. [nSP1] will be refused if above [FSP1].**									
	2011	Sub 0	IntegerT	16 Bit	rw	90	30 to 300	1	0	mm
FSP2	**Switch point 'far' 2, [FSP2] must be greater than [nSP2]. Please take into account the current [nSP2] value. [FSP2] will be refused if below [nSP2].**									
	2020	Sub 0	IntegerT	16 Bit	rw	210	30 to 300	1	0	mm
nSP2	**Switch point 'near' 2, [nSP2] must be smaller than [FSP12]. Please take into account the current [FSP2] value. [nSP2] will be refused if above [FSP2].**									
	2021	Sub 0	IntegerT	16 Bit	rw	190	30 to 300	1	0	mm

Events

Code	Name	Type	Description
30480 d / 77 10 h	Short circuit	Error	Check installation
16912 d / 42 10 h	Device temperature over-run	Warning	Clear source of heat
16928 d / 42 20 h	Device temperature under-run	Warning	Insulate device

Events

Code	Name	Type	Description
36016 d / 8C B0 h	NEAR - Object too close to sensor	Warning	Device exceeds datasheet-specification, but stilll works
36017 d / 8C B1 h	FAR - Object too far from sensor	Warning	Device exceeds datasheet-specification, but stilll works
36056 d / 8C D8 h	Overexposure	Warning	Please check your application
36057 d / 8C D9 h	Underexposure	Warning	Please check your application
36004 d / 8C A4 h	Plausibility error	Warning	Check Measurement
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
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