



8028178 1023

AS30

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Please note the validity of the additional operating instructions for automation functions

ENGLISH

1. Physical layer

Note: The IO-Link Device's max. current consumption (inclusive load current) shall not exceed the master port's max. output power current.

SIO Modus	yes
Min Cycle Time	1.1 ms
Baudrate <sup>2</sup>	COM3
Process Data Length (IN)	8 Byte
IODD version	V1.0
Valid for IO-Link version	1.1.0

2. Process data

Record<sup>1</sup>: 8 Byte

Bitoffset																	
Byte 0	Reserved	63	62	61	60	59	58	57	56								
Type/Subindex	Unsigned Integer 16																
Bitoffset																	
Byte 1	Reserved	55	54	53	52	51	50	49	48								
Type/Subindex	Unsigned Integer 16																
Bitoffset																	
Byte 2	Reserved	47	46	45	44	43	42	41	40								
Type/Subindex	Unsigned Integer 16																
Bitoffset																	
Byte 3	Reserved	39	38	37	36	35	34	33	32								
Type/Subindex	Unsigned Integer 16																
Bitoffset																	
Byte 4	Edge position	31	30	29	28	27	26	25	24								
Type/Subindex	Unsigned Integer 16																
Bitoffset																	
Byte 5	Edge position	23	22	21	20	19	18	17	16								
Type/Subindex	Unsigned Integer 16																
Bitoffset																	
Byte 6	Reserved	15	14	PD invalid	13	QoR alarm	12	Reserved	11	Reserved	10	Reserved	9	Edge immediate loss	8		
Type/Subindex	Unsigned Integer 2		Boolean		14	Boolean		13	Boolean		12	Boolean		11	Boolean		
Bitoffset																	
Byte 7	Edge loss top	7	Edge loss bottom	6	5	4	3	2	1	0							
Type/Subindex	Boolean		8	Boolean		7	Boolean		6	Boolean		5	Boolean		4	Boolean	

3. Service data

The following ISDUs will not be saved via Data-Storage: Device specific tag, Alignment help enable, Sender configuration, Find me, Job assurance part 1 and Job assurance part 2

IO-Link specific							
Index dec (hex)	Name	Format (Offset)	Length	Access <sup>1</sup>	Default Value	Value / Range	Remark [Unit]
12 (0x0C)	Device Access Locks	Record <sup>3</sup>	2 Byte	rw			
2 (0x02)	Data Storage Lock	Bit (1)	1 Bit	rw			
4 (0x04)	Local User Interface Lock	Bit (3)	1 Bit	rw			
17 (0x11)	Vendor Text	String	64 Byte	ro	<a href="http://www.sick.com">www.sick.com</a>		
19 (0x13)	Product ID	String	13 Byte	ro	see Index 219		
20 (0x14)	Product Text	String	64 Byte	ro	Array Sensor		
21 (0x15)	Serial Number	String	8 Byte	ro			
22 (0x16)	Hardware Version	String	12 Byte	ro			
23 (0x17)	Firmware Version	String	30 Byte	ro			
24 (0x18)	Application Specific Tag	String	32 Byte	rw	*****		
36 (0x24)	Device Status	UInt	8 Bit	ro	0	0 = Device is OK 1 = Maintenance required 2 = Out of specification 3 = Functional check 4 = Failure 5...255 = Reserved	
37 (0x25)	Detailed Device Status	Array <sup>3</sup>	15 Byte	ro	Octet String [5]		
40 (0x28)	Process Data Input	PD In	8 Byte	ro			
SICK device specific							
Index dec (hex)	Name	Format (Offset)	Length	Access <sup>1</sup>	Default Value	Value / Range	Remark [Unit]
13 (0x0D)	Profile Characteristic	Array	14 Byte	ro	Unsigned Integer16 [7]	This parameter contains the list of ProfileIdentifiers (PID's) corresponding to the device profile implemented in the device.	
14 (0x0E)	PDInput Descriptor	Array	12 Byte	ro	Octet String [4]	This parameter contains the description of the data structure of the process input data of the device.	

<sup>1</sup> ro = read only, wo = write only, rw = read/write  
<sup>2</sup> COM values specify the bitrate (see IO-Link specification): COM1 (4,8 kbit/s), COM2 (38,4 kbit/s), COM3 (230,4 kbit/s)  
<sup>3</sup> Subindex access not supported

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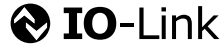
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Please note the validity of the additional operating instructions for automation functions

### ENGLISH

SICK device specific							
Index dec (hex)	Name	Format (Offset)	Length	Access <sup>1</sup>	Default Value	Value / Range	Remark [Unit]
58 (0x3A)	Teach-in channel	UInt	8 Bit	rw	0	0 = Qint1 1 = Qint2 2 = Qint3 3 = Qint4	Qint to be taught via system commands.
59 (0x3B)	Teach-in status	UInt	8 Bit	ro	0	0 = Idle 1 = SP1 Success 2 = SP2 Success 3 = SP12 Success 4 = Wait for command 5 = Busy 7 = Error	See IO-Link Smart Sensor Profile Version 1.0 chapter 12.4 (link below)
60 (0x3C)	Qint. 1 SP1/SP2	Record	4 Byte	rw			
1 (0x01)	Qint. SP1	Bit (16)	16 Bit	rw		Setpoint for switching output [Resolution see ISDU 265, Subindex 3].	
2 (0x02)	Qint. SP2	Bit (0)	16 Bit	rw		Setpoint for switching output [Resolution see ISDU 265, Subindex 3].	
61 (0x3D)	Qint. 1 configuration	Record	5 Byte	rw			
1 (0x01)	Qint. logic	Bit (32)	8 Bit	rw		0 = Value as specified 1 = Inverted value	
2 (0x02)	Qint. mode	Bit (24)	8 Bit	rw		0 = Deactivated 1 = Single point mode 2 = Window mode 3 = Two point mode	
3 (0x03)	Qint. hysteresis	Bit (8)	16 Bit	rw		Hysteresis for setpoints [Resolution see ISDU 265, Subindex 3].	
4 (0x04)	Qint. task	Bit (0)	8 Bit	rw		0 = Edge position	
62 (0x3E)	Qint. 2 SP1/SP2	Record	4 Byte	rw			
1 (0x01)	Qint. SP1	Bit (16)	16 Bit	rw		Setpoint for switching output [Resolution see ISDU 265, Subindex 3].	
2 (0x02)	Qint. SP2	Bit (0)	16 Bit	rw		Setpoint for switching output [Resolution see ISDU 265, Subindex 3].	
63 (0x3F)	Qint. 2 configuration	Record	5 Byte	rw			
1 (0x01)	Qint. logic	Bit (32)	8 Bit	rw		0 = Value as specified 1 = Inverted value	
2 (0x02)	Qint. mode	Bit (24)	8 Bit	rw		0 = Deactivated 1 = Single point mode 2 = Window mode 3 = Two point mode	
3 (0x03)	Qint. hysteresis	Bit (8)	16 Bit	rw		Hysteresis for setpoints [Resolution see ISDU 265, Subindex 3].	
4 (0x04)	Qint. task	Bit (0)	8 Bit	rw		0 = Edge position	
64 (0x40)	Device specific tag	String	32 Byte	rw	*****	Will not be stored in data storage.	
69 (0x45)	Alignment help enable	UInt	8 Bit	rw	0	0 = Alignment help inactive 1 = Alignment help active	Variable to enable alignment help of sensor. Alignment values may be read out on ISDU 101.
73 (0x49)	Sensitivity	UInt	8 Bit	rw	1	0 = Fine 1 = Middle 2 = Coarse 3 = Reserved (vendor default)	General detection sensitivity
74 (0x4A)	Reading direction	UInt	8 Bit	rw	0	0 = Connector to head 1 = Head to connector 2 = Defined by input pin	
75 (0x4B)	Automatic drift correction	UInt	8 Bit	rw	1	0 = Inactive 1 = Active	Automatic teach edge adaption to compensate contamination.
76 (0x4C)	Teach-in tolerance	UInt	8 Bit	rw	3	0 = Sensitive 1 = Middle 2 = Robust 3 = Auto (Scaled by sensitivity)	Tolerance in identifying the taught-in edge according to its contrast and remission levels.
82 (0x52)	Teach-in edges	Array <sup>3</sup>	232 Byte	rw	0	Unsigned Integer16 [116]	Each four array elements represent one teach edge with position [metric], width [metric], remission [digits] and contrast [digits] values represented as 16 bit integer values in this order.
83 (0x53)	Smoothing	Record	2 Byte	rw		Edge position values are averaged when active.	
1 (0x01)	Activation	Bit (8)	8 Bit	rw	0	0 = Inactive 1 = Active	
2 (0x02)	Length	Bit (0)	8 Bit	rw	33	Length in milliseconds of the median filter used for smoothing.	
86 (0x56)	Edge teach-in configuration	Record	3 Byte	rw		Defines which of the taught-in edges (in edge search direction) shall be used in run mode.	
1 (0x01)	Edge index	Bit (16)	8 Bit	rw	0	0...29	0 = Teach selection is disabled, 1-29 = Teach edge number
2 (0x02)	Reserved	Bit (8)	8 Bit	rw	0	0	
3 (0x03)	Teach-in background	Bit (0)	8 Bit	rw	0	0 = Proximity teach background 1 = Reflector teach background 2 = Ext. illumination teach background	Background used for this teach configuration if ISDU 264 (Background selection) is AUTO.
97 (0x61)	Sender configuration	UInt	8 Bit	rw	0	0 = Sender active 1 = Sender not active	No measurement with inactive sender possible.
101 (0x65)	Alignment help	Record	8 Byte	ro		Measured alignment data of the sensor when alignment help is enabled (see ISDU 69).	
1 (0x01)	Nominal scanning distance offset	Bit (32)	32 Bit	ro		Offset from nominal scanning distance. Invalid measurement: INT32_MAX. [µm]	
2 (0x02)	Tipping angle	Bit (0)	4 Byte	ro		Target tipping angle to sensor (in °). Invalid measurement: NAN. [°]	
110 (0x6E)	Operating mode	UInt	8 Bit	wo		0 = Edge detection 1 = Object positioning	
114 (0x72)	Quality of teach	UInt	8 Bit	ro	100	0...100	Quality value in percent.
117 (0x75)	Display direction switch	UInt	8 Bit	rw	0	0 = Reading direction not turned 1 = Reading direction upside-down	
120 (0x78)	Process data select	UInt	8 Bit	rw	0	0 = Width measurement 1 = Center determination	Defines if process data shall contain width (distance between edge 1 and 2) or center (center point between edge 1 and 2).

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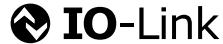
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Index dec (hex)	Name	Format (Offset)	Length	Access <sup>1</sup>	Default Value	Value / Range	Remark [Unit]
121 (0x79)	Pin 2 configuration	UInt	8 Bit	rw	37	0 = Deactivated 37 = Qa Edge position 98 = Qa Edge 1 coverage	
122 (0x7A)	Pin 5 configuration	UInt	8 Bit	rw	34	0 = Deactivated 1 = External input (Smart Task) 17 = Edge teach-in 34 = Switching output QL2 39 = Switching output QL1 80 = Reflector teach-in 81 = Input for reading direction and edge search 82 = Input for turning teach-in pattern 100 = Ext. illumination teach-in 120 = Quality of run alarm output 140 = Deactivate sender	
153 (0x99)	Internal temperature	Record	5 Byte	ro			
1 (0x01)	Current temperature	Bit (32)	8 Bit	ro		Internal device temperature in °C.	
2 (0x02)	Maximum temperature all time	Bit (24)	8 Bit	ro		Maximum internal device temperature since production of sensor in °C.	
3 (0x03)	Minimum temperature all time	Bit (16)	8 Bit	ro		Minimum internal device temperature since production of sensor in °C.	
4 (0x04)	Maximum temperature since last reset	Bit (8)	8 Bit	ro		Maximum internal device temperature since last reset via system command in °C.	
5 (0x05)	Minimum temperature since last reset	Bit (0)	8 Bit	ro		Minimum internal device temperature since last reset via system command in °C.	
160 (0xA0)	Key lock type	UInt	8 Bit	rw	0	0 = Interface fully locked 1 = Edge teach-in and area teach-in available 2 = Edge teach-in available 3 = Area teach-in available	Defines the configuration options available on user interface when key lock is active.
165 (0xA5)	Live edges	Array <sup>3</sup>	232 Byte	ro	0	Unsigned Integer16 [116]	Each four array elements represent one live edge with position [metric], width [metric], remission [digits] and contrast [digits] values represented as 16 bit integer values in this order.
175 (0xAF)	Quality of run	UInt	8 Bit	ro	100	Quality level in percent.	
176 (0xB0)	Quality of run alarm threshold	UInt	8 Bit	rw	50	0...90	Threshold position in percent. [%]
190 (0xBE)	Operating hours	Record	8 Byte	ro			
1 (0x01)	Total operating hours	Bit (32)	32 Bit	ro		Operating hours since production of sensor in h.	
2 (0x02)	Operating hours since last reset	Bit (0)	32 Bit	ro		Operating hours since last reset via system command in h.	
204 (0xCC)	Find me	UInt	8 Bit	rw	0	0 = Deactivated 1 = Yellow LED blinks with 1 Hz 16 = Yellow LED + Q (pin 5) blinks with 1 Hz	Only for identification purposes.
206 (0xCE)	Direction of edge search	Record	2 Byte	rw			
1 (0x01)	Edge direction	Bit (8)	8 Bit	rw	0	0 = Bottom to top 1 = Top to bottom 2 = Defined by input pin	
2 (0x02)	Reserved	Bit (0)	8 Bit	rw	0		
207 (0xCF)	Setup analog output	Record	5 Byte	rw		Current values in steps of 100 µA.	
1 (0x01)	Signal at beginning of measurement area	Bit (32)	8 Bit	rw	40	40...200	
2 (0x02)	Signal at end of measurement area	Bit (24)	8 Bit	rw	200	40...200	
3 (0x03)	Signal beyond measurement area, lower limit or no coverage	Bit (16)	8 Bit	rw	35	0...240	
4 (0x04)	Signal beyond measurement area, upper limit or full coverage	Bit (8)	8 Bit	rw	205	0...240	
5 (0x05)	Signal upon loosing edge	Bit (0)	8 Bit	rw	30	0...240	
209 (0xD1)	Measurement area	Record	4 Byte	rw		Describes the limits of the measurement area of the sensor. By default this is the maximum field of view which may be read on ISDU 265.	
1 (0x01)	Lower limit	Bit (16)	16 Bit	rw		Lower limit for measurement area [Resolution see ISDU 265, Subindex 3].	
2 (0x02)	Upper limit	Bit (0)	16 Bit	rw		Upper limit for measurement area [Resolution see ISDU 265, Subindex 3].	
219 (0xDB)	Product ID (order number)	Record	7 Byte	ro			
1 (0x01)	Product ID IO-Link device	Bit (0)	7 Byte	ro		SICK order number of the AS30.	
222 (0xDE)	Job assurance part 1	Array <sup>3</sup>	232 Byte	rw	Integer8 [232]	One complete AS30 job consists of both Job Assurance ISDUs (222 and 223). Use system command 208 to activate a loaded job after it has been written to ISDUs 222 and 223. Use system command 209 before reading out a job on the same ISDUs.	
223 (0xDF)	Job assurance part 2	Array <sup>3</sup>	232 Byte	rw	Integer8 [232]	See index 222.	
227 (0xE3)	Notification Handling	Record	2 Byte	rw		Enable / Disable generation of IO-Link events.	
1 (0x01)	General setup	Bit (8)	8 Bit	rw	0	0 = All enabled 1 = All disabled 2 = Events enabled, PD invalid flag disabled 3 = Events disabled, PD invalid flag enabled	
2 (0x02)	Specific setup	Bit (0)	8 Bit	rw	0	0 = Ignore edge loss events 1 = Throw events on edge loss	
235 (0xEB)	Energy saving mode for display	UInt	8 Bit	rw	1	0 = Off 1 = On	Display switches off after five minutes of non-use when active.
242 (0xF2)	Analog output edge loss indicator	UInt	8 Bit	rw	0	0 = Edge loss beyond measurement area top / bottom 1 = Edge loss full / no coverage	Chooses if the edge loss signals shall indicate the direction or type of loss.
261 (0x105)	External illumination settings	Record	2 Byte	rw		Settings for the external illumination accessory for the sensor.	
1 (0x01)	Intensity	Bit (8)	8 Bit	rw	50	1...100	Intensity of the external illumination in percent. [%]
2 (0x02)	Balancer	Bit (0)	8 Bit	rw	0	-100...100	Boost the dark areas if the ext. ill. is placed from the side and a teach is not possible.

<sup>1</sup> ro = read only, wo = write only, rw = read/write

<sup>2</sup> COM values specify the bitrate (see IO-Link specification): COM1 (4,8 kbit/s), COM2 (38,4 kbit/s), COM3 (230,4 kbit/s)

<sup>3</sup> Subindex access not supported

# SICK

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## AS30

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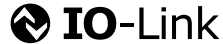
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Please note the validity of the additional operating instructions for automation functions

### ENGLISH

SICK device specific									
Index dec (hex)	Name	Format (Offset)	Length	Access <sup>1</sup>	Default Value	Value / Range	Remark [Unit]		
264 (0x108)	Background selection	Record <sup>3</sup>	1 Byte	rw					
1 (0x01)	Default Background	Bit (0)	2 Bit	rw	0	0 = Auto 1 = Proximity 2 = Reflector 3 = Ext. Illumination	On Auto background is selected dependent on teach data. If teach data is not valid, background is selected during startup.		
2 (0x02)	Detect reflector covering edge only	Bit (2)	1 Bit	rw	0	true = active false = inactive			
3 (0x03)	Detect edge on background only	Bit (3)	1 Bit	rw	0	true = active false = inactive			
265 (0x109)	Geometrical properties	Record	18 Byte	ro		Geometrical properties of sensor.			
1 (0x01)	Measurement range minimum	Bit (128)	16 Bit	ro		Minimum value of measurement range consequently minimum value of process data, setpoints etc.			
2 (0x02)	Measurement range maximum	Bit (112)	16 Bit	ro		Minimum value of measurement range consequently minimum value of process data, setpoints etc.			
3 (0x03)	Measurement range resolution	Bit (96)	16 Bit	ro		Resolution factor of measurement data, if positiv unit of measurement data is 1 mm / resolution, if negative unit of measurement data is 1 mm * resolution.			
4 (0x04)	Sensing distance nominal	Bit (64)	32 Bit	ro		Nominal sensing distance of object edge			
5 (0x05)	Sensing distance minimum	Bit (32)	32 Bit	ro		Minimum working sensing distance			
6 (0x06)	Sensing distance maximum	Bit (0)	32 Bit	ro		Maximum working sensing distance			
1080 (0x438)	SLTI Version	String	8 Byte	ro	1.1.0				
1081 (0x439)	Input selector 1	UInt	8 Bit	rw	0	0 = Qint.1 1 = Qint.2 2 = Qint.3 3 = Qint.4 64 = Ext. input 1			
1082 (0x43A)	Input Selector 2	UInt	8 Bit	rw	1	0 = Qint.1 1 = Qint.2 2 = Qint.3 3 = Qint.4 64 = Ext. input 1			
1083 (0x43B)	Logic 1	UInt	8 Bit	rw	0	0 = Direct 1 = And 2 = Or 3 = Reserved 4 = Reserved			
1084 (0x43C)	Logic 2	UInt	8 Bit	rw	0	0 = Direct 1 = And 2 = Or 3 = Reserved 4 = Reserved			
1085 (0x43D)	Timer 1 Mode	UInt	8 Bit	rw	0	0 = Deactivated 1 = T-on delay 2 = T-off delay 3 = T-on/T-off delay 4 = Impulse			
1086 (0x43E)	Timer 2 Mode	UInt	8 Bit	rw	0	0 = Deactivated 1 = T-on delay 2 = T-off delay 3 = T-on/T-off delay 4 = Impulse			
1087 (0x43F)	Time 1 Setup	UInt	16 Bit	rw	1	1...30000 = Time value in ms	Time value in ms. [ms]		
1088 (0x440)	Time 2 Setup	UInt	16 Bit	rw	1	1...30000 = Time value in ms	Time value in ms. [ms]		
1089 (0x441)	Inverter 1	UInt	8 Bit	rw	0	0 = Not inverted 1 = Inverted			
1090 (0x442)	Inverter 2	UInt	8 Bit	rw	0	0 = Not inverted 1 = Inverted			
1093 (0x445)	Inverter External input	UInt	8 Bit	rw	0	0 = Not inverted 1 = Inverted	Setup of the inverter.		
16000 (0x3E80)	Device ID setup	UInt	32 Bit	rw	8389131	8389126 = Version 1 8389131 = Version 3 8389134 = Version 2	Chooses the IO-Link Device ID which is initialized during startup.		
16384 (0x4000)	Qint. 3 SP1/SP2	Record	4 Byte	rw					
1 (0x01)	Qint. SP1	Bit (16)	16 Bit	rw		Setpoint for switching output [Resolution see ISDU 265, Subindex 3].			
2 (0x02)	Qint. SP2	Bit (0)	16 Bit	rw		Setpoint for switching output [Resolution see ISDU 265, Subindex 3].			
16385 (0x4001)	Qint. 3 configuration	Record	5 Byte	rw					
1 (0x01)	Qint. logic	Bit (32)	8 Bit	rw	0 = Value as specified 1 = Inverted value				
2 (0x02)	Qint. mode	Bit (24)	8 Bit	rw	0 = Deactivated 1 = Single point mode 2 = Window mode 3 = Two point mode				
3 (0x03)	Qint. hysteresis	Bit (8)	16 Bit	rw		Hysteresis for setpoints [Resolution see ISDU 265, Subindex 3].			
4 (0x04)	Qint. task	Bit (0)	8 Bit	rw	0 = Edge position				
16386 (0x4002)	Qint. 4 SP1/SP2	Record	4 Byte	rw					
1 (0x01)	Qint. SP1	Bit (16)	16 Bit	rw		Setpoint for switching output [Resolution see ISDU 265, Subindex 3].			
2 (0x02)	Qint. SP2	Bit (0)	16 Bit	rw		Setpoint for switching output [Resolution see ISDU 265, Subindex 3].			
16387 (0x4003)	Qint. 4 configuration	Record	5 Byte	rw					
1 (0x01)	Qint. logic	Bit (32)	8 Bit	rw	0 = Value as specified 1 = Inverted value				

<sup>1</sup> ro = read only, wo = write only, rw = read/write

<sup>2</sup> COM values specify the bitrate (see IO-Link specification): COM1 (4,8 kbit/s), COM2 (38,4 kbit/s), COM3 (230,4 kbit/s)

<sup>3</sup> Subindex access not supported



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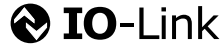
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Please note the validity of the additional operating instructions for automation functions

ENGLISH

SICK device specific							
Index dec (hex)	Name	Format (Offset)	Length	Access <sup>1</sup>	Default Value	Value / Range	Remark [Unit]
2 (0x02)	Qint. mode	Bit (24)	8 Bit	rw	0 = Deactivated 1 = Single point mode 2 = Window mode 3 = Two point mode		
3 (0x03)	Qint. hysteresis	Bit (8)	16 Bit	rw	Hysteresis for setpoints [Resolution see ISDU 265, Subindex 3].		
4 (0x04)	Qint. task	Bit (0)	8 Bit	rw	0 = Edge position		

Standard command						
Index dec (hex)	Standard Command	Access <sup>1</sup>	Value	Name	Value / Range	Remark [Unit]
2 (0x02)	Standard Command	wo	65	SP1 single value teach		
			66	SP2 single value teach		
			75	Static edge teach-in		
			80	BM_UNLOCK_S		
			81	BM_UNLOCK_F		
			82	BM_UNLOCK_T		
			83	BM_ACTIVATE		
			128	Device Reset		
			129	Application Reset		
			130	Restore Factory Settings		
			208	Restore / Activate job in ISDUs 222 and 223		
			209	Renew / Update job in ISDUs 222 and 223		
			211	Reflector teach-in		
			212	Alignment teach-in		
			213	Background teach-in		
			228	Reset diagnostic parameters		

Events			
Code dec (hex)	Name	Type	Remark [Unit]
20480 (0x5000)	Device hardware fault	Error	Device Exchange
36000 (0x8CA0)	Short Circuit on Output Pin	Warning	There is a short circuit at least on one output pin.
36001 (0x8CA1)	New Parameters	Notification	Parameters have been changed not via IO-Link interface.
36004 (0x8CA4)	Quality of Run Alarm	Warning	Low device performance, check detecting conditions. E.g. correct alignment or clean lenses.
36032 (0x8CC0)	Edge Loss Immediate	Notification	Edge moves out of field of view sideways.
36033 (0x8CC1)	Edge Loss Top	Notification	Edge moves out of field of view at maximum value side.
36034 (0x8CC2)	Edge Loss Bottom	Notification	Edge moves out of field of view at minimum value side.

4. Job Assurance

Job assurance allows to set, save and manage parameters for specific formats or recipes via IO-Link. The following overview shows the necessary ISDUs.

1. Job content	
Teach-in channel (58), Qint. 1 SP1/SP2 (60), Qint. 1 configuration (61), Qint. 2 SP1/SP2 (62), Qint. 2 configuration (63), Sensitivity (73), Automatic drift correction (75), Teach-in tolerance (76), Teach-in edges (82), Smoothing (83), Edge teach-in configuration (86), Process data select (120), Quality of run alarm threshold (176), Direction of edge search (206), Qint. 3 SP1/SP2 (16384), Qint. 3 configuration (16385), Qint. 4 SP1/SP2 (16386), Qint. 4 configuration (16387)	

<sup>1</sup> ro = read only, wo = write only, rw = read/write  
<sup>2</sup> COM values specify the bitrate (see IO-Link specification): COM1 (4,8 kbit/s), COM2 (38,4 kbit/s), COM3 (230,4 kbit/s)  
<sup>3</sup> Subindex access not supported