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IO-Link

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

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	1.0 ms
Baudrate[2]	COM3
Process Data Length (IN)	4 Byte
IODD version	V1.02
Valid for IO-Link version	1.1.0

2. Process data

Record: 4 Byte

Bitoffset	31	30	29	28	27	26	25	24
Byte 0	Position							
Type/Subindex	Integer 16							
Bitoffset	23	22	21	20	19	18	17	16
Byte 1	Position							
Type/Subindex	Integer 16							
Bitoffset	15	14	13	12	11	10	9	8
Byte 2	Qint.16	Qint.15	Qint.14	Qint.13	Qint.12	Qint.11	Qint.10	Qint.9
Type/Subindex	Boolean 16	Boolean 15	Boolean 14	Boolean 13	Boolean 12	Boolean 11	Boolean 10	Boolean 9
Bitoffset	7	6	5	4	3	2	1	0
Byte 3	Qint.8	Qint.7	Qint.6	Qint.5	Qint.4	Qint.3	Qint.2	Qint.1
Type/Subindex	Boolean 8	Boolean 7	Boolean 6	Boolean 5	Boolean 4	Boolean 3	Boolean 2	Boolean 1

3. Service data

The following ISDUs will not be saved via Data-Storage: Teach-in Channel and Device Specific Name

IO-Link specific							
Index dec (hex)	Name	Format (Offset)	Length	Access[1]	Default Value	Value / Range	Remark [Unit]
12 (0x0C)	Device Access Locks	Record	2 Byte	rw			
1 (0x01)	Parameter (write) Access Lock	Bit (0)	1 Bit	rw			
2 (0x02)	Data Storage Lock	Bit (1)	1 Bit	rw			
3 (0x03)	Local Parameterization Lock	Bit (2)	1 Bit	rw			
4 (0x04)	Local User Interface Lock	Bit (3)	1 Bit	rw			
16 (0x10)	Vendor Name	String	64 Byte	ro	SICK AG		
17 (0x11)	Vendor Text	String	64 Byte	ro	www.sick.com		
18 (0x12)	Product Name	String	64 Byte	ro	MPS-G		
19 (0x13)	Product ID	String	64 Byte	ro			
20 (0x14)	Product Text	String	64 Byte	ro			
21 (0x15)	Serial Number	String	16 Byte	ro			
22 (0x16)	Hardware Version	String	64 Byte	ro			
23 (0x17)	Firmware Version	String	64 Byte	ro			
24 (0x18)	Application Specific Tag	String	32 Byte	rw	***		
36 (0x24)	Device Status	UInt	8 Bit	ro	0 = Device is OK 1 = Maintenance required 2 = Out of specification 3 = Functional check 4 = Failure 5...255 = Reserved		
40 (0x28)	Process Data Input	PD In	4 Byte	ro			

SICK device specific							
Index dec (hex)	Name	Format (Offset)	Length	Access[1]	Default Value	Value / Range	Remark [Unit]
13 (0x0D)	Profile Characteristic	Record	10 Byte	ro			
1 (0x01)	Profile Identifier	Bit (64)	16 Bit	ro	1		
2 (0x02)	Profile Identifier	Bit (48)	16 Bit	ro	32768		
3 (0x03)	Profile Identifier	Bit (32)	16 Bit	ro	32769		

[1] ro = read only, wo = write only, rw = read/write
[2] COM values specify the bitrate (see IO-Link specification): COM1 (4,8 kbit/s), COM2 (38,4 kbit/s), COM3 (230,4 kbit/s)

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Index dec (hex)	Name	Format (Offset)	Length	Access[1]	Default Value	Value / Range	Remark [Unit]
4 (0x04)	Profile Identifier	Bit (16)	16 Bit	ro	32770		
5 (0x05)	Profile Identifier	Bit (0)	16 Bit	ro	32772		
14 (0x0E)	PDInputDescriptor	Record	6 Byte	ro	PDInputDescriptor		
15 (0x0F)	PDOutputDescriptor	Record	3 Byte	ro	PDOutputDescriptor		
58 (0x3A)	Teach-in Channel	UInt	8 Bit	rw	0	0 = Default Qint (Qint.1) 1 = Qint.1 2 = Qint.2 3 = Qint.3 4 = Qint.4 5 = Qint.5 6 = Qint.6 7 = Qint.7 8 = Qint.8 9 = Qint.9 10 = Qint.10 11 = Qint.11 12 = Qint.12 13 = Qint.13 14 = Qint.14 15 = Qint.15 16 = Qint.16	The Qint channel that is going to be teached
59 (0x3B)	Teach-in State	Record	1 Byte	ro	Teach-in result provides feedback on the status and the results of the teach-in activities		
1 (0x01)	State	Bit (0)	4 Bit	ro	0	0 = IDLE 1 = SP1 SUCCESS 2 = SP2 SUCCESS 3 = SP12 SUCCESS 4 = WAIT FOR COMMAND 5 = BUSY 7 = ERROR	
2 (0x02)	Flag SP1 TP1	Bit (4)	1 Bit	ro	false	true false	
3 (0x03)	Flag SP1 TP2	Bit (7)	1 Bit	ro	false	true false	
4 (0x04)	Flag SP2 TP1	Bit (6)	1 Bit	ro	false	true false	
5 (0x05)	Flag SP2 TP2	Bit (5)	1 Bit	ro	false	true false	
60 (0x3C)	Qint.1 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
61 (0x3D)	Qint.1 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode 130 = Move 131 = Grip	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
62 (0x3E)	Qint.2 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
63 (0x3F)	Qint.2 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode 130 = Move 131 = Grip	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
64 (0x40)	Device Specific Name	String	32 Byte	rw	***		
120 (0x78)	Process Data Select	UInt	8 Bit	rw	0	0 = Position (2 Bytes) + 16xBDC (2 Bytes)	
121 (0x79)	Pin 2 Configuration	UInt	8 Bit	rw	0	0 = Deactivated 36 = Qint.2	

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SICK device specific

Index dec (hex)	Name	Format (Offset)	Length	Access[1]	Default Value	Value / Range	Remark [Unit]
170 (0xAA)	Switchpoint Width [x10µm]	Record	32 Byte	rw	Switchpoint width		
1 (0x01)	Qint.1 Width	Bit (240)	16 Bit	rw	200	0...1000	
2 (0x02)	Qint.2 Width	Bit (224)	16 Bit	rw	200	0...1000	
3 (0x03)	Qint.3 Width	Bit (208)	16 Bit	rw	200	0...1000	
4 (0x04)	Qint.4 Width	Bit (192)	16 Bit	rw	200	0...1000	
5 (0x05)	Qint.5 Width	Bit (176)	16 Bit	rw	200	0...1000	
6 (0x06)	Qint.6 Width	Bit (160)	16 Bit	rw	200	0...1000	
7 (0x07)	Qint.7 Width	Bit (144)	16 Bit	rw	200	0...1000	
8 (0x08)	Qint.8 Width	Bit (128)	16 Bit	rw	200	0...1000	
9 (0x09)	Qint.9 Width	Bit (112)	16 Bit	rw	200	0...1000	
10 (0x0A)	Qint.10 Width	Bit (96)	16 Bit	rw	200	0...1000	
11 (0x0B)	Qint.11 Width	Bit (80)	16 Bit	rw	200	0...1000	
12 (0x0C)	Qint.12 Width	Bit (64)	16 Bit	rw	200	0...1000	
13 (0x0D)	Qint.13 Width	Bit (48)	16 Bit	rw	200	0...1000	
14 (0x0E)	Qint.14 Width	Bit (32)	16 Bit	rw	200	0...1000	
15 (0x0F)	Qint.15 Width	Bit (16)	16 Bit	rw	200	0...1000	
16 (0x10)	Qint.16 Width	Bit (0)	16 Bit	rw	200	0...1000	
171 (0xAB)	Switchpoint Tolerance [x10µm]	Record	6 Byte	rw	Switchpoint tolerance		
1 (0x01)	Qint.1 Tolerance	Bit (32)	16 Bit	rw	100		
2 (0x02)	Qint.2 Tolerance	Bit (16)	16 Bit	rw	100		
3 (0x03)	Qint.3 Tolerance	Bit (0)	16 Bit	rw	100		
204 (0xCC)	Find Me	UInt	8 Bit	wo	0	0 = Stop FindMe 1 = LED flash	
256 (0x100)	Position [x10µm]	Int	16 Bit	ro	Current position [x10µm]		
257 (0x101)	Position Offset [x10µm]	Int	16 Bit	rw	0	Offset that is added to the current position [x10µm]	
261 (0x105)	Current Position Repeatability [mm]	Float	4 Byte	ro			
4352 (0x1100)	Temperature [°C]	Record	5 Byte	ro			
1 (0x01)	Current Temperature	Bit (32)	8 Bit	ro			
2 (0x02)	Max Temperature All Time	Bit (24)	8 Bit	ro			
3 (0x03)	Min Temperature All Time	Bit (16)	8 Bit	ro			
4 (0x04)	Max Temperature Since Last Reset	Bit (8)	8 Bit	ro			
5 (0x05)	Min Temperature Since Last Reset	Bit (0)	8 Bit	ro			
4372 (0x1114)	Actuator Travel [x10µm]	UInt	16 Bit	ro			
4374 (0x1116)	Total Actuator Travel [sum m]	Float	4 Byte	rw			
4375 (0x1117)	Average Actuator Velocity [m/s]	Record	8 Byte	ro			
1 (0x01)	Extend (positive direction)	Bit (32)	4 Byte	ro			
2 (0x02)	Retract (negative direction)	Bit (0)	4 Byte	ro			
4379 (0x111B)	Actuator Travel Time [ms]	Record	8 Byte	ro			
1 (0x01)	Extend (positive direction)	Bit (32)	4 Byte	ro			
2 (0x02)	Retract (negative direction)	Bit (0)	4 Byte	ro			
4380 (0x111C)	Cycle Time [ms]	Float	4 Byte	ro			
4381 (0x111D)	Dwell Time [ms]	Record	8 Byte	ro			
1 (0x01)	Start Position	Bit (32)	4 Byte	ro			
2 (0x02)	Stop Position	Bit (0)	4 Byte	ro			
4382 (0x111E)	Cycle Count [sum]	UInt	32 Bit	rw			
4411 (0x113B)	Maximum Acceleration [x0.01g]	Record	6 Byte	ro	Maximum acceleration since last reset [x0.01g]. Maximum acceleration can be reset using standard command 160.		
1 (0x01)	X	Bit (32)	16 Bit	ro	X-Axis		

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2 (0x02)	Y	Bit (16)	16 Bit	ro	Y-Axis		
3 (0x03)	Z	Bit (0)	16 Bit	ro	Z-Axis		
4455 (0x1167)	Orientation Euler Angles (Current) [x0.1mrad]	Record	6 Byte	ro			
1 (0x01)	Roll	Bit (32)	16 Bit	ro	Roll value		
2 (0x02)	Pitch	Bit (16)	16 Bit	ro	Pitch value		
3 (0x03)	Yaw	Bit (0)	16 Bit	ro	Yaw value		
4466 (0x1172)	Main Orientation	Int	8 Bit	ro	-3 = Z-Axis negative -2 = Y-Axis negative -1 = X-Axis negative 1 = X-Axis positive 2 = Y-Axis positive 3 = Z-Axis positive	Axis that represents the main orientation	
4467 (0x1173)	Reference Axis Settings	Record	1 Byte	rw	Set axis that is used as reference axis. Current main orientation can be set as reference axis using standard command 161.		
1 (0x01)	Reference Axis	Bit (0)	8 Bit	rw	3	-3 = Z-Axis negative -2 = Y-Axis negative -1 = X-Axis negative 1 = X-Axis positive 2 = Y-Axis positive 3 = Z-Axis positive	
4477 (0x117D)	Statistical Signal Parameters - Settings	Record	2 Byte	rw			
1 (0x01)	Block Length	Bit (0)	16 Bit	rw	1024	128 = Samples: 128 256 = Samples: 256 512 = Samples: 512 1024 = Samples: 1024 2048 = Samples: 2048	Number of samples used for calculation of statistical signal parameters
4483 (0x1183)	Statistical Signal Parameters - RMS (Current) [g]	Record	12 Byte	ro			
1 (0x01)	X	Bit (64)	4 Byte	ro	X-Axis		
2 (0x02)	Y	Bit (32)	4 Byte	ro	Y-Axis		
3 (0x03)	Z	Bit (0)	4 Byte	ro	Z-Axis		
4495 (0x118F)	Statistical Signal Parameters - Kurtosis (Current)	Record	12 Byte	ro			
1 (0x01)	X	Bit (64)	4 Byte	ro	X-Axis		
2 (0x02)	Y	Bit (32)	4 Byte	ro	Y-Axis		
3 (0x03)	Z	Bit (0)	4 Byte	ro	Z-Axis		
4507 (0x119B)	Statistical Signal Parameters - Impulse Factor (Current)	Record	12 Byte	ro			
1 (0x01)	X	Bit (64)	4 Byte	ro	X-Axis		
2 (0x02)	Y	Bit (32)	4 Byte	ro	Y-Axis		
3 (0x03)	Z	Bit (0)	4 Byte	ro	Z-Axis		
4602 (0x11FA)	Current Field Strength [mT]	Record	8 Byte	ro			
1 (0x01)	Current1	Bit (32)	4 Byte	ro	Magnetic field strength of TMR 1		
2 (0x02)	Current2	Bit (0)	4 Byte	ro	Magnetic field strength of TMR2		
4604 (0x11FC)	Peak Field Strength [mT]	Record	8 Byte	ro			
1 (0x01)	Current1	Bit (32)	4 Byte	ro	Magnetic field strength of TMR 1		
2 (0x02)	Current2	Bit (0)	4 Byte	ro	Magnetic field strength of TMR2		
14905 (0x3A39)	Platform Version	String	32 Byte	ro	Platform Version		
14908 (0x3A3C)	Sensor Head Firmware Version	String	32 Byte	ro	Sensor Head Firmware Version		
16384 (0x4000)	Qint.3 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16385 (0x4001)	Qint.3 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode 131 = Grip	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
16386 (0x4002)	Qint.4 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	

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Index dec (hex)	Name	Format (Offset)	Length	Access[1]	Default Value	Value / Range	Remark [Unit]
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16387 (0x4003)	Qint.4 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
16388 (0x4004)	Qint.5 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16389 (0x4005)	Qint.5 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
16390 (0x4006)	Qint.6 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16391 (0x4007)	Qint.6 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
16392 (0x4008)	Qint.7 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16393 (0x4009)	Qint.7 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
16394 (0x400A)	Qint.8 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16395 (0x400B)	Qint.8 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
16396 (0x400C)	Qint.9 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16397 (0x400D)	Qint.9 Configuration	Record	4 Byte	rw			

[1] ro = read only, wo = write only, rw = read/write
[2] COM values specify the bitrate (see IO-Link specification): COM1 (4,8 kbit/s), COM2 (38,4 kbit/s), COM3 (230,4 kbit/s)

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SICK device specific

Index dec (hex)	Name	Format (Offset)	Length	Access[1]	Default Value	Value / Range	Remark [Unit]
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
16398 (0x400E)	Qint.10 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16399 (0x400F)	Qint.10 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
16400 (0x4010)	Qint.11 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16401 (0x4011)	Qint.11 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
16402 (0x4012)	Qint.12 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16403 (0x4013)	Qint.12 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
16404 (0x4014)	Qint.13 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16405 (0x4015)	Qint.13 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
16406 (0x4016)	Qint.14 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16407 (0x4017)	Qint.14 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	

[1] ro = read only, wo = write only, rw = read/write
[2] COM values specify the bitrate (see IO-Link specification): COM1 (4,8 kbit/s), COM2 (38,4 kbit/s), COM3 (230,4 kbit/s)

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IO-Link

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ENGLISH

SICK device specific

Index dec (hex)	Name	Format (Offset)	Length	Access[1]	Default Value	Value / Range	Remark [Unit]
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
16408 (0x4018)	Qint.15 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16409 (0x4019)	Qint.15 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		
16410 (0x401A)	Qint.16 SP1 / SP2	Record	4 Byte	rw			
1 (0x01)	SP1	Bit (16)	16 Bit	rw	0	Setpoint 1	
2 (0x02)	SP2	Bit (0)	16 Bit	rw	0	Setpoint 2	
16411 (0x401B)	Qint.16 Configuration	Record	4 Byte	rw			
1 (0x01)	Switchpoint Logic	Bit (24)	8 Bit	rw	0	0 = Not inverted 1 = Inverted	
2 (0x02)	Switchpoint Mode	Bit (16)	8 Bit	rw	0	0 = Deactivated 1 = Single Point Mode 2 = Window Mode 3 = Two Point Mode 129 = Cylinder Switch Mode	
3 (0x03)	Switchpoint Hysteresis	Bit (0)	16 Bit	rw	70		

Standard command

Index dec (hex)		Access[1]	Value	Name	Remark [Unit]
2 (0x02)	Standard Command	wo	65	SP1 Single Value Teach	
			66	SP2 Single Value Teach	
			75	Dynamic Teach Start	
			76	Dynamic Teach Stop	
			77	Dynamic Teach Apply	
			79	Teach Cancel	
			128	Device Reset	
			130	Restore Factory Settings	
			160	Maximum Acceleration Reset	
			161	Set Current Main Orientation as Reference Axis	

[1] ro = read only, wo = write only, rw = read/write
[2] COM values specify the bitrate (see IO-Link specification): COM1 (4,8 kbit/s), COM2 (38,4 kbit/s), COM3 (230,4 kbit/s)