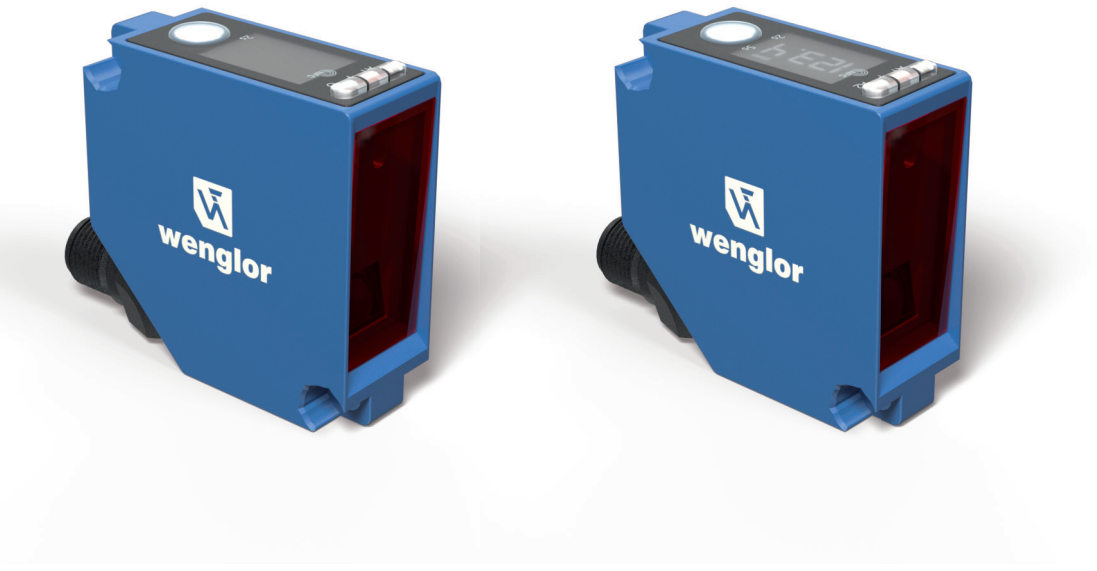
EN

wenglor
the innovative family

P1PCxxx

Laser Distance Sensors Triangulation



IO-Link

Interface Description

Subject to change without notice
Available as PDF version only
Status: 03.02.2026
www.wenglor.com

P1PCxxx

Vendor ID

Product	hex	dec	hex (Bytes)	dec (Bytes)
wenglor sensoric GmbH	0x0057	87	00 57	0 87

Device ID

Product	hex	dec	hex (Bytes)	dec (Bytes)
P1PC011	0x000082	130	00 00 82	0 0 130
P1PC012	0x000083	131	00 00 83	0 0 131
P1PC121	0x000086	134	00 00 86	0 0 134
P1PC122	0x000087	135	00 00 87	0 0 135
P1PC111	0x000088	136	00 00 88	0 0 136
P1PC112	0x000089	137	00 00 89	0 0 137
P1PC221	0x00008A	138	00 00 8A	0 0 138
P1PC222	0x00008B	139	00 00 8B	0 0 139
P1PC211	0x000078	120	00 00 78	0 0 120
P1PC212	0x00008C	140	00 00 8C	0 0 140
P1PC321	0x00008F	143	00 00 8F	0 0 143
P1PC322	0x000090	144	00 00 90	0 0 144
P1PC311	0x000075	117	00 00 75	0 0 117
P1PC312	0x000091	145	00 00 91	0 0 145

IO-Link Information

IO-Link Version:	V1.1.4
Data Storage:	Yes
Blockparameter:	Yes
Min Cycle time:	800 μs
SIO-Mode:	Yes
COM-Mode:	COM3
ISDU:	Yes
Process data In (Device to Master):	48 Bit
Process data Out (Master to Device):	8 Bit

IO-Link Profile

Common Profile
Function Class Identification
Function Class Diagnosis
Function Class Extended Identification
Smart Sensor Profil - Measuring Sensor, Type 3.2
Smart Sensor Profil - Transducer Disable

Process input data (Length: 48 Bit)

Device to Master

Process Data Type 1 (Index 114 = 0 --> Distance in µm, Index 114 = 1 --> Distance in Mil)

Subindex	Name	Bit Offset	Length	Range
1	Measurement Value: Distance in μm Distance in Mil	16	Int32	P1PC0xx: 30.000...80.000 µm P1PC1xx: 40.000...240.000 µm P1PC2xx: 50.000...350.000 µm P1PC3xx: 60.000...660.000 µm
2	Scale	8	Int8	– 6 = μm
3	Indication Error/Warning 4	7	1 Bit	0 = aus 1 = an
4	Indication Error/Warning 3	6	1 Bit	0 = aus 1 = an
5	Indication Error/Warning 2	5	1 Bit	0 = aus 1 = an
6	Indication Error/Warning 1	4	1 Bit	0 = aus 1 = an
7	Error	3	1 Bit	0 = aus 1 = an
8	Warning	2	1 Bit	0 = aus 1 = an
9	SSC2	1	1 Bit	0 = aus 1 = an
10	SSC1	0	1 Bit	0 = aus 1 = an

These values are outside the measurement range and show information about the measurement:

Measured Value =	0x80000008	–2147483640	Object too close
	0x7FFFFFF8	2147483640	Object too far
	0x7FFFFFFC	2147483644	No measurement data

	Octet 0 (MSB)								Octet 1								Octet 2								Octet 3							
Subindex	1																															
Bit Offset	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
	Measurement value 32 bit																															

	Octet 4								Octet 5 (LSB)							
Subindex	2								**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Bit Offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
	Scale															

Process Data Type 2 (Index 114 = 2 --> Distance in µm + Intensity)

Subindex	Name	Bit Offset	Length	Range
1	Measurement Value: Distance in μm	24	Int24	P1PC0xx: 30.000...80.000 µm P1PC1xx: 40.000...240.000 µm P1PC2xx: 50.000...350.000 µm P1PC3xx: 60.000...660.000 µm
2	Intensity	8	Int16	0...9999
3	Indication Error/Warning 4	7	1 Bit	0 = false 1 = true
4	Indication Error/Warning 3	6	1 Bit	0 = false 1 = true
5	Indication Error/Warning 2	5	1 Bit	0 = false 1 = true
6	Indication Error/Warning 1	4	1 Bit	0 = false 1 = true
7	Error	3	1 Bit	0 = false 1 = true
8	Warning	2	1 Bit	0 = false 1 = true
9	SSC2	1	1 Bit	0 = false 1 = true
10	SSC1	0	1 Bit	0 = false 1 = true

These values are outside the measurement range and show information about the measurement:

Measured Value =	0x800008	8388616	Object too close
	0x7FFFF8	8388600	Object too far
	0x7FFFFC	8388604	No measurement data

	Octet 0 (MSB)								Octet 1								Octet 2								Octet 3							
Subindex	**1**																								**2**							
Bit Offset	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
	Measurement value 24 bit																								Intensity							

	Octet 4								Octet 5 (LSB)							
Subindex	**2**								**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Bit Offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
	Intensity															

Process Data Type 3 (Index 114 = 3 --> Distance in µm + Counter)

Subindex	Name	Bit Offset	Length	Range
1	Measurement Value: Distance in μm	24	Int24	P1PC0xx: 30.000...80.000 µm P1PC1xx: 40.000...240.000 µm P1PC2xx: 50.000...350.000 µm P1PC3xx: 60.000...660.000 µm
2	Counter	8	Int16	0...65535
3	Indication Error/Warning 4	7	1 Bit	0 = false 1 = true
4	Indication Error/Warning 3	6	1 Bit	0 = false 1 = true
5	Indication Error/Warning 2	5	1 Bit	0 = false 1 = true
6	Indication Error/Warning 1	4	1 Bit	0 = false 1 = true
7	Error	3	1 Bit	0 = false 1 = true
8	Warning	2	1 Bit	0 = false 1 = true
9	SSC2	1	1 Bit	0 = false 1 = true
10	SSC1	0	1 Bit	0 = false 1 = true

These values are outside the measurement range and show information about the measurement:

Measured Value =	0x800008	8388616	Object too close
	0x7FFFF8	8388600	Object too far
	0x7FFFFC	8388604	No measurement data

	Octet 0 (MSB)								Octet 1								Octet 2								Octet 3							
Subindex	1																								2							
Bit Offset	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
	Measurement value 24 bit																								Counter							

	Octet 4								Octet 5 (LSB)							
Subindex	2								3	4	5	6	7	8	9	10
Bit Offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
	Counter															

Process data (Length: 8 Bit)

Master to Device

Subindex	Name	Bit Offset	Length	Range
1	Emitted Light	0	1 Bit	0 = On 1 = Off
2	Find Me	1	1 Bit	0 = Off 1 = Blinking
3	Teach SSC1	3	1 Bit	0 → 1 Start Teach
4	Teach SSC2	4	1 Bit	0 → 1 Start Teach
5	Reset Counter	7	1 Bit	0 → 1 Start Reset

	Octet 0 (MSB)							
Subindex	5			4	3		2	1
Bit Offset	7	6	5	4	3	2	1	0

Parameter

Name	Index (hex)	Index (dec)	Sub-index	R/W	Data type	Data Storage	Dynamic	Modify others	Default value	Range
Identification										
Vendor Name	0x0010	**16**	0	R	String				wenglor sensoric GmbH	
Vendor Text	0x0011	**17**	0	R	String				the innovative family	
Product Name	0x0012	**18**	0	R	String				P1PCxxx	
Product ID	0x0013	**19**	0	R	String				P1PCxxx	
Product Text	0x0014	**20**	0	R	String				Laser Distance Sensors Triangulation	
Serial Number	0x0015	**21**	0	R	String				—	
Hardware Version	0x0016	**22**	0	R	String				—	
Firmware Version	0x0017	**23**	0	R	String				—	
Tags										
Application Specific Tag	0x0018	**24**	0	R/W	String 32 Byte	X			***	
Function Tag	0x0019	**25**	0	R/W	String 32 Byte	X			***	
Location Tag	0x001A	**26**	0	R/W	String 32 Byte	X			***	
Service Functions										
System Command	0x0002	2	0	W	Uint8			X	—	Locator Start = 0x7E (126) Locator Stop = 0x7F (127) Device Reset = 0x80 (128) Application Reset = 0x81 (129) Restore Factory Settings = 0x82 (130) Back-to-Box = 0x83 (131)
Device Device Settings										
Device Access Locks.Data Storage Lock	0x000C	**12**	2	R/W	Bool	X			0 = unlocked	0 = unlocked 1 = Data Storage Locked
Device Access Locks.Local Parameterization Lock	0x000C	**12**	3	R/W	Bool	X			0 = unlocked	0 = unlocked 1 = Data Storage Locked
NFC Lock	0x0305	**773**	0	R/W	UInt8	X			0 = unlocked	0 = read/write 1 = read only 2 = locked
Display Content	0x0075	**117**	0	R/W	Uint8	X			0 = Distance	0 = Distance 1 = Intensity 2 = Counter
Display Rotate	0x00A0	**160**	0	R/W	Uint8	X			0 = Off	0 = Off 1 = On
Protection Housing	0x0077	**119**	0	R/W	Uint8	X			0 = Off	0 = Off 1 = On
Measurement Value Settings										
Capture Mode	0x0202	**514**	0	R/W	Uint8	X			0 = Auto	0 = Auto 1 = Fixed
Maximum Exposure Time	0x07D3	**2003**	0	R/W	Uint16	X			200 µs	1…1600 µs
Fixed Exposure Time	0x07D4	**2004**	0	R/W	Uint32	X			200 µs	1…1600 µs
Current Exposure Time	0x2690	**9872**	0	R	Uint32		X		—	µs/6
Measurement Filter	0x0110	**272**	0	R/W	Uint8	X			3	0 = Aus 1…9
Emitted Light	0x00E0	**224**	0	R/W	Uint8	X			0 = An	0 = An 1 = Aus
Process Data Format	0x0114	**276**	0	R/W	Uint8	X			0 = Micrometer	0 = Distance in µm 1 = Distance in Mil 2 = Distance in µm + Intensity 3 = Distance in µm + Counter
Detection Range Near	0x0112	**274**	0	R/W	Uint16	X			0 mm	P1PC0xx: 30…80 mm P1PC1xx: 40…240 mm P1PC2xx: 50…350 mm P1PC3xx: 60…660 mm 0 mm = No Limitation

Name	Index (hex)	Index (dec)	Sub-index	R/W	Data type	Data Storage	Dynamic	Modify others	Default value	Range
Detection Range Far	0x0113	**275**	0	R//W	Uint16	X			30.000 mm	P1PC0xx: 30…80 mm P1PC1xx: 40…240 mm P1PC2xx: 50…350 mm P1PC3xx: 60…660 mm 30.000 mm = No Limitation
Offset	0x0116	**278**	0	R/W	Sint32	X			0 µm	
Offset Preset	0x04FE	**1278**	0	R/W	Sint32	X			0 µm	0 µm, P1PC0xx: 30.000…80.000 µm P1PC1xx: 40.000…240.000 µm P1PC2xx: 50.000…350.000 µm P1PC3xx: 60.000…660.000 µm
Apply Offest Preset	0x0500	**1280**	0	W	Uint8			X	---	1 = Apply
SSC1										
SSC1 Teach-Mode	0x0290	**656**	0	R/W	Uint8	X		X	0 = Foreground	0 = Foreground 1 = Background 2 = Window 3 = Jump Detection 4 = Distance+Intensity
SSC1 Switch Point	0x0270	**624**	0	R/W	Sint32	X			80.000 µm 240.000 µm 350.000 µm 660.000 µm	P1PC0xx: 30.000…80.000 µm P1PC1xx: 40.000…240.000 µm P1PC2xx: 50.000…350.000 µm P1PC3xx: 60.000…660.000 µm
SSC1 Hysteresis Mode	0x0230	**560**	0	R/W	Uint8	X			0 = Automatic	0 = Automatic 1 = Manual
SSC1 Hysteresis	0x0300	**768**	0	R/W	Uint32	X			P1PC0xx: 300 µm P1PC1xx: 700 µm P1PC2xx: 1000 µm P1PC3xx: 1800 µm	P1PC0xx: 2 µm…50.000 µm P1PC1xx: 3 µm…200.000 µm P1PC2xx: 4 µm…300.000 µm P1PC3xx: 5 µm…600.000 µm
SSC1 Window (SSC1 Mode = Window)										
SSC1 Window Near	0x0271	**625**	0	R/W	Uint32	X			30.000 µm	P1PC0xx: 2 µm…50.000 µm P1PC1xx: 3 µm…200.000 µm P1PC2xx: 4 µm…300.000 µm P1PC3xx: 5 µm…600.000 µm
SSC1 Window Far	0x0272	**626**	0	R/W	Uint32	X			30.000 µm	P1PC0xx: 2 µm…50.000 µm P1PC1xx: 3 µm…200.000 µm P1PC2xx: 4 µm…300.000 µm P1PC3xx: 5 µm…600.000 µm
SSC1 Jump (SSC1 Mode = Jump Detection)										
SSC1 Jump Height min.	0x02A0	**672**	0	R/W	Uint32	X			0	0 = Automatic, P1PC0xx: 3 µm…50.000 µm P1PC1xx: 5 µm…200.000 µm P1PC2xx: 6 µm…300.000 µm P1PC3xx: 8 µm…600.000 µm
SSC1 Jump Height max.	0x02A1	**673**	0	R/W	Uint32	X			4294967295 = No Limitation	4294967295 = No Limitation, P1PC0xx: 3 µm…50.000 µm P1PC1xx: 5 µm…200.000 µm P1PC2xx: 6 µm…300.000 µm P1PC3xx: 8 µm…600.000 µm
SSC1 Jump Direction	0x02A2	**674**	0	R/W	Uint8	X			1	0=Positive 1=Negative 2=Booth
SSC1 Jump Time Delta	0x02A4	**676**	0	R/W	Uint16	X			50	1..256 Cycles
SSC1 Jump Impulse	0x02A3	**675**	0	R/W	Uint32	X			0	0 = Hold 1 = 1 ms … 10.000 ms
SSC1 Intensity (SSC1 Mode = Distance+Intensity)										
SSC1 Distance Window	0x0275	**629**	0	R/W	Uint32	x			P1PC0xx: 300 µm P1PC1xx: 700 µm P1PC2xx: 1000 µm P1PC3xx: 1800 µm	P1PC0xx: 2 µm…10.000 µm P1PC1xx: 3 µm…10.000 µm P1PC2xx: 4 µm…10.000 µm P1PC3xx: 5 µm…10.000 µm

Name	Index (hex)	Index (dec)	Sub-index	R/W	Data type	Data Storage	Dynamic	Modify others	Default value	Range
SSC1 Intensity Switch Point	0x0276	**630**	0	R/W	Uint32	x			5000	1...9999
SSC1 Intensity Window	0x0277	**631**	0	R/W	Uint8	x			4	1…50 %
SSC2										
SSC2 Teach Mode	0x0291	**657**	0	R/W	Uint8	X			0 = Foreground	0 = Foreground 1 = Background 2 = Window 3 = Jump Detection 4= Distance+Intensity
SSC2 Switch Point	0x0280	**640**	0	R/W	Uint16	X			80.000 µm 240.000 µm 350.000 µm 660.000 µm	P1PC0xx: 30.000…80.000 µm P1PC1xx: 40.000…240.000 µm P1PC2xx: 50.000…350.000 µm P1PC3xx: 60.000…600.000 µm
SSC2 Hysteresis Mode	0x0231	**561**	0	R/W	Uint8	X			0 = Automatic	0 = Automatic 1 = Manual
SSC2 Hysteresis	0x0301	**769**	0	R/W	Uint32	X			P1PC0xx: 300 µm P1PC1xx: 700 µm P1PC2xx: 1000 µm P1PC3xx: 1800 µm	P1PC0xx: 2 µm…50.000 µm P1PC1xx: 3 µm…200.000 µm P1PC2xx: 4 µm…300.000 µm P1PC3xx: 5 µm…600.000 µm
SSC2 Window (SSC2 Mode = Window)										
SSC2 Window Near	0x0281	**641**	0	R/W	Uint32	X			30.000 µm	P1PC0xx: 2 µm…50.000 µm P1PC1xx: 3 µm…200.000 µm P1PC2xx: 4 µm…300.000 µm P1PC3xx: 5 µm…600.000 µm
SSC2 Window Far	0x0282	**642**	0	R/W	Uint32	X			30.000 µm	P1PC0xx: 2 µm…50.000 µm P1PC1xx: 3 µm…200.000 µm P1PC2xx: 4 µm…300.000 µm P1PC3xx: 5 µm…600.000 µm
SSC2 Jump (SSC2 Mode = Jump Detection)										
SSC2 Jump Height min.	0x02B0	**688**	0	R/W	Uint32	X			0	0 = Automatic, P1PC0xx: 3 µm…50.000 µm P1PC1xx: 5 µm…200.000 µm P1PC2xx: 6 µm…300.000 µm P1PC3xx: 8 µm…600.000 µm
SSC2 Jump Height max.	0x02B1	**689**	0	R/W	Uint32	X			4294967295 = No Limitation	4294967295 = Kein Begrenzung, P1PC0xx: 3 µm…50.000 µm P1PC1xx: 5 µm…200.000 µm P1PC2xx: 6 µm…300.000 µm P1PC3xx: 8 µm…600.000 µm
SSC2 Jump Direction	0x02B2	**690**	0	R/W	Uint8	X			1	0 = Positive 1 = Negative 2 = Booth
SSC2 Jump Time Delta	0x02B4	**692**	0	R/W	Uint16	X			50	1..256 Cycles
SSC2 Jump Impulse	0x02B3	**691**	0	R/W	Uint32	X			0	0 = Hold 1 = 1 ms … 10.000 ms
SSC2 Intensity (SSC2 Mode = Distance+Intensity)										
SSC2 Distance Window	0x0285	**645**	0	R/W	Uint32	x			P1PC0xx: 300 µm P1PC1xx: 700 µm P1PC2xx: 1000 µm P1PC3xx: 1800 µm	P1PC0xx: 2 µm…10.000 µm P1PC1xx: 3 µm…10.000 µm P1PC2xx: 4 µm…10.000 µm P1PC3xx: 5 µm…10.000 µm
SSC2 Intensity Switch Point	0x0286	**646**	0	R/W	Uint32	x			5000	1...9999
SSC2 Intensity Window	0x0287	**647**	0	R/W	Uint8	x			4	1…50 %
Teach-In										
SSC1 Teach-In	0x0200	**512**	0	W	Uint8			X	—	1 = Teach-In
SSC2 Teach-In	0x0201	**513**	0	W	Uint8			X	—	1 = Teach-In
Pin Function										

Name	Index (hex)	Index (dec)	Sub-index	R/W	Data type	Data Storage	Dynamic	Modify others	Default value	Range
E/A1 Pin Function	0x0040	**64**	0	R/W	Uint8	X	X	X	0 = Switching Output	0 = Switching Output SSC1 1 = Error Output 2 = Warning Output 3 = Emitted Light Disengageable 4 = Extern Teach 7 = Counter Output 8 = Counter Reset Input
E/A2 Pin Function	0x0041	**65**	0	R/W	Uint8	X		X	P1xCx1x: not available Rest: 0 = Switching Output	0 = Switching Output SSC2 1 = Error Output 2 = Warning Output 3 = Emitted Light Disengageable 4 = Extern Teach 6 = Antivalent Switching Output 7 = Counter Output 8 = Counter Reset Input
E3 Pin Function	0x0042	**66**	0	R/W	Uint8	X		X	3 = Emitted Light Disengageable	3 = Emitted Light Disengageable 4 = Extern Teach 5 = Disabled 8 = Counter Reset Input
Digital Outputs										
A1 (SSC, Error or Warning Output)										
A1 On Delay	0x0050	**80**	0	R/W	Uint16	X			0 ms	0...10.000 ms
A1 Off Delay	0x0060	**96**	0	R/W	Uint16	X			0 ms	0...10.000 ms
A1 NO/NC	0x0210	**528**	0	R/W	Uint8	X			0 = Schließer	0 = Schließer 1 = Öffner
A1 NPN/PNP/P-P	0x0220	**544**	0	R/W	Uint8	X			0 = PNP	0 = PNP 1 = NPN 2 = Push-Pull
A2 (SSC, Error or Warning Output)										
A2 On Delay	0x0051	**81**	0	R/W	Uint16	X			0 ms	0...10.000 ms
A2 Off Delay	0x0061	**97**	0	R/W	Uint16	X			0 ms	0...10.000 ms
A2 NO/NC	0x0211	**529**	0	R/W	Uint8	X			0 = NO	0 = NO 1 = NC
A2 NPN/PNP/P-P	0x0221	**545**	0	R/W	Uint8	X			0 = PNP	0 = PNP 1 = NPN 2 = Push-Pull
Digital Inputs										
E1 (Teach Input or Emitted Light)										
E1 Input Ub Active/Inactive	0x0260	**608**	0	R/W	Uint8	X			0 = Ub active	0 = Ub Active 1 = Ub Inactive
E2 (Teach Input or Emitted Light)										
E2 Input Ub Active/Inactive	0x0261	**609**	0	R/W	Uint8	X			0 = Ub active	0 = Ub Active 1 = Ub Inactive
E3 (Teach Input or Emitted Light)										
E3 Input Ub Active/Inactive	0x0262	**610**	0	R/W	Uint8	X			0 = Ub active	0 = Ub Active 1 = Ub Inactive
Analog Outputs										
O Analog Output (Only Analog Versions)										
O Analog Teach-In	0x0080	**128**	0	W	Uint8			X	—	1 = Teach 0 V / 4 mA 2 = Teach 10 V / 20 mA 3 = Teach 5 V / 12 mA
O Analog Teach Mode	0x0085	**133**	0	R/W	Uint8	X			0 = Distance	0 = Distance 1 = Tolerance
O Analog Substitute Values	0x0084	**132**	0	R/W	Uint8	X			1 = On	0 = Off 1 = On
O Distance (O Analog Output Mode = Distance)										

Name	Index (hex)	Index (dec)	Sub-index	R/W	Data type	Data Storage	Dynamic	Modify others	Default value	Range
O Analog 0 V / 4 mA	0x0081	**129**	0	R/W	Uint32	X			30.000 µm 40.000 µm 50.000 µm 60.000 µm	P1PC0xx: 30.000…80.000 µm P1PC1xx: 40.000…240.000 µm P1PC2xx: 50.000…350.000 µm P1PC3xx: 60.000…660.000 µm
O Analog 10 V / 20 mA	0x0082	**130**	0	R/W	Uint32	X			80.000 µm 240.000 µm 350.000 µm 660.000 µm	P1PC0xx: 30.000…80.000 µm P1PC1xx: 40.000…240.000 µm P1PC2xx: 50.000…350.000 µm P1PC3xx: 60.000…660.000 µm
O Tolerance (O Analog Output Mode = Tolerance)										
O Tolerance Range	0x0087	**135**	0	R/W	Uint32	X			P1PC0xx: 25.000 µm P1PC1xx: 100.000 µm P1PC2xx: 150.000 µm P1PC3xx: 300.000 µm	P1PC0xx: 1000...80.000 µm P1PC1xx: 1000…240.000 µm P1PC2xx: 1000…350.000 µm P1PC3xx: 1000…660.000 µm
O Tolerance Characteristic	0x0088	**136**	0	R/W	Uint8	X			0 = Positive Slope	0 = Positive slope 1 = Negative Slope
O Analog 5 V / 12 mA	0x0086	**134**	0	R/W	Sint32	X			P1PC0xx: 55.000 µm P1PC1xx: 140.000 µm P1PC2xx: 200.000 µm P1PC3xx: 360.000 µm	P1PC0xx: 30.000…80.000 µm P1PC1xx: 40.000…240.000 µm P1PC2xx: 50.000…350.000 µm P1PC3xx: 60.000…660.000 µm
Counter										
Counter Source	0x0073	**115**	0	R/W	Uint8	X			0 = SSC1	0 = SSC1 1 = SSC2 2 = Warning 3 = Error
Counter Value	0x228D	**8845**	0	R	Uint8		X			
Counter Threshold	0x0074	**116**	0	R/W	Uint16	X			0 = Disabled	0 = Disabled 1...65535
Counter Reset	0x050D	**1293**	0	W	Uint8			X	---	1 = Reset

Observation

Name	Index (hex)	Index (dec)	Sub-index	R/W	Data type	Data Storage	Dynamic	Modify others	Default value	Range
Intensity										
Intensity	0x1220	**4640**	0	R	Uint32		X			

Diagnosis

Name	Index (hex)	Index (dec)	Sub-index	R/W	Data type	Data Storage	Dynamic	Modify others	Default value	Range
Status										
Device Status	0x0024	**36**	0	R	Uint8		X		0	0 = Device is OK 1 = Maintenance required 2 = Out of specification 3 = Functional check 4 = Failure
Detailed Device Status	0x0025	**37**	0	R	4x Array of StringT3		X		0	Shows the pending Events (maximum 4)
Additional Status Information	0x1300	**4864**	0	R	Uint32		X		0	Value 0 = No Warning / Errors Measurement: Bit 0 = Signal Warning Bit 2 = Overexposure Bit 3 = Ambient light Bit 4 = Object to Close Bit 5 = Object to Far Bit 6 = No Measurement data Bit 8 = Emitted Light off Other: Bit 17 = Fatal Device Error Bit 18 = Temperature Error Bit 19 = Temperature Warning High Bit 20 = Temperature Warning Low Bit 28 = Undervoltage detection Bit 29 = Short Circuit
Self Check	0x2518	**9496**	0	R	Uint32		X		–	–
Condition Monitoring Functions										
Process Data Indication										
Indication Warning/Error 1	0x1310	**4880**	0	R//W	Uint8	X			Signal Warning	Measurement: 0 = Signal Warning 2 = Overexposure 3 = Ambient Light 4 = Object Too Close 5 = Object Too Far 6 = No Measurement Data 8 = Emitted Light Off Other: 17 = Fatal Error 18 = Temperature Error 19 = Temperature Warning High 20 = Temperature Warning Low 22 = Laser Error 28 = Undervoltage 29 = Short Circuit
Indication Warning/Error 2	0x1311	**4881**	0	R//W	Uint8	X			Ambient Light	
Indication Warning/Error 3	0x1312	**4882**	0	R//W	Uint8	X			Temperature Warning High	
Indication Warning/Error 4	0x1313	**4883**	0	R//W	Uint8	X			Short Circuit	
Warning Output Configuration										
Warning Output Configuration	0x1314	**4884**	0	R//W	Uint32	X			• Signal Warning • Overexposure • Ambient light • Temperature Warning High • Temperature Warning Low • Undervoltage detection	0 = Not use as Warning / Error 1 = Used as Warning / Error Measurement: Bit 0 = Signal Warning Bit 2 = Overexposure Bit 3 = Ambient Light Bit 4 = Object Too Close Bit 5 = Object Too Car Bit 6 = No Measurement Data Bit 8 = Emitted Light Off Other: Bit 17 = Fatal Error Bit 18 = Temperature Error Bit 19 = Temperature Warning High Bit 20 = Temperature Warning Low Bit 22 = Laser Error Bit 28 = Undervoltage Bit 29 = Short Circuit
Error Output Configuration										
Error Output Configuration	0x1315	**4885**	0	R//W	Uint32	X			• Object to close • Object to far • No Measure-ment data • Fatal Device Error • Temperature Error • Laser Error • Short Circuit	

Name	Index (hex)	Index (dec)	Sub-index	R/W	Data type	Data Storage	Dynamic	Modify others	Default value	Range
Measuring Data Channel										
Lower Limit	0x4080	**16512**	1	R	Int32				-2147482880 / -214748.2880	µm / Inch
Upper Limit			2	R	Int32				2147482880 / 214748.2880	µm / Inch
Unit Code			3	R	Uint16				1010 = Meter	1010 = Meter 1019 = Inch
Scale			4	R	Int8				-6 /-3	
Device Simulation										
Simulation Mode	0x0310	**784**	0	R/W	Uint8		X		0	0 = Off 1 = On
Device Simulation Enabled (Simulation Mode = 1)										
Simulation Measured Value	0x0315	**789**	0	R/W	Uint32		X		2147483647	Measurement value [µm] 2147483647 = Use Process Value, -2147483640 = Too Close, 2147483640 = Too Far, 2147483644 = No Measurement
Simulation SSC1	0x0331	**817**	0	R/W	Uint8		X		2	0 = Off 1 = Active 2 = Use Process Value
Simulation SSC2	0x0332	**818**	0	R/W	Uint8		X		2	0 = Off 1 = Active 2 = Use Process Value
Simulation Counter	0x032E	**814**	0	R/W	Uint16		X			
Simulation Analog Output Voltage (if implemented)	0x0316	**790**	0	R/W	Uint32		X		2	21,1 mA = Use Process Value 3,5…21,0 mA (values transfered in 1/10 mA)
Simulation Analog Output Current (if implemented)	0x0316	**790**	0	R/W	Uint32		X		2	10,1 V = Use Process Value 0,0…10,0 V (values transfered in 1/10 V)
Simulation Signal Warning	0x031B	**795**	0	R/W	Uint8		X		2	0 = Off 1 = On 2 = Use Process Value
Simulation Overexposed Signal	0x031C	**796**	0	R/W	Uint8		X		2	
Simulation Ambient Light	0x031E	**798**	0	R/W	Uint8		X		2	
Simulation Fatal Error	0x0323	**803**	0	R/W	Uint8		X		2	
Simulation Temperature Error	0x0324	**804**	0	R/W	Uint8		X		2	
Simulation Temperature Warning High	0x0325	**805**	0	R/W	Uint8		X		2	
Simulation Temperature Warning Low	0x032F	**815**	0	R/W	Uint8		X		2	
Simulation Undervoltage	0x0327	**807**	0	R/W	Uint8		X		2	
Simulation Short Circuit	0x0328	**808**	0	R/W	Uint8		X		2	
Simulation Laser Error	0x032D	**813**	0	R/W	Uint8		X		2	

Events

Name	Event Code	Type	Specification
Maintenence required - Cleaning	0x8C40	Information	IO-Link
General malfunction – unknown error	0x1000	Error	IO-Link
Short circuit – Check installation	0x7710	Error	IO-Link
Device temperature over-run – Clear source of heat	0x4210	Warning	IO-Link
Device temperature under-run – Insulate device	0x4220	Warning	IO-Link
Temperature fault – Overload	0x4000	Error	IO-Link
Primary supply voltage under-run – Check tolerance	0x5111	Warning	IO-Link