

P1PKxxx

Retro-Reflex Sensor for Clear Glass Recognition

High-End with Teach-in



Interface Description

Subject to change without notice

Available as PDF version only

Status: 1.1.0

Status: 11.09.2019

www.wenglor.com

IO-Link P1PKxxx High-End

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)
P1PK102	0x2A0F05	2756357	2A 0F 05	42 15 5
P1PK104	0x2A0F0A	2756362	2A 0F 0A	42 15 10

IO-Link Version:	V 1.1
Data Storage:	Yes
Blockparameter:	Yes
Min Cycle Time:	3,6 ms
SIO-Mode:	Yes
COM-Mode:	COM2
ISDU:	Yes
Process data In (Device to Master):	24 Bit
Process data Out (Master to Device):	—

Process data (Length: 24 Bit)

Subindex	Name	Bit Offset	Datentyp	Range
1	A1 Output	0	Bool	0 = Off 1 = On
2	Signal Warning	1	Bool	0 = Off 1 = On
3	---	2	---	---
4	---	3	---	---
5	Short Circuit	4	Bool	0 = Off 1 = On
6	---	5	---	---
7	Overtemperature	6	Bool	0 = Off 1 = On
8	---	7	---	---
9	Switchpoint	8	Uint8	0...245
10	Signal	16	Uint8	0...255

Octet 0

Subindex	10							
Bit Offset	23	22	21	20	19	18	17	16

Octet 1

Subindex	9							
Bit Offset	15	14	13	12	11	10	9	8

Octet 2

Subindex	8	7	6	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	Dy-namic	Modi-fy oth-ers	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				P1PKxxx	
Product ID	0x0013	19	0	R	String				P1PKxxx	
Product Text	0x0014	20	0	R	String				Retro-Reflex Sensor for Clear Glass Recognition	
Serial Number	0x0015	21	0	R	String				—	
Hardware Revision	0x0016	22	0	R	String				—	
Firmware Revision	0x0017	23	0	R	String				—	
Application Specific Tag	0x0018	24	0	R/W	String 32 Byte	X			***	
Parameter										
Device Settings										
System Command	0x0002	2	0	W	UInt8			X	—	Factory Reset = 0x82 (130)
Device Access Locks. Parameter (write) Access Lock	0x000C	12	1	R/W	Bool	X			0	0 = unlocked 1 = Parameter Access locked
Device Access Locks. Data Storage Lock	0x000C	12	2	R/W	Bool	X			0	0 = unlocked 1 = Data Storage locked
Device Access Locks. Local Parameterization	0x000C	12	3	R/W	Bool	X			0	0 = unlocked 1 = Local Parameterization locked
NFC Lock	0x0305	773	0	R/W	UInt8	X			0	0 = read/write 1 = read only 2 = locked
Measured Value Settings										
Emitted Light	0x00E0	224		R/W	UInt8	X			0	0 = Light on 1 = Light off
Operating Mode	0x0110	272		R/W	UInt8	X			0	0 = Standard 1 = Speed
Hysteresis	0x0300	768		R/W	UInt8	X			0	0 = Small 1 = Large
Gain	0x0301	769	0	R/W	Bool	X			1	0 = Low Gain 1 = High Gain
Dynamic Readjustment	0x0302	770	0	R/W	Bool	X			1	0 = Readjustment off 1 = Readjustment on
Dynamic Readjustment Storage	0x0303	771	0	R/W	Bool	X			1	0 = Non-volatile storage of adjusted Switch Point disabled 1 = Non-volatile storage of adjusted Switch Point enabled
Dynamic Readjustment Time	0x0304	772	0	R/W	UInt32	X			3600	5...3600 s
Pin Function										
A1 Pin Function	0x0040	64	0	R/W	UInt8	X		X	0 = Switching Output	0 = Switching Output 1 = Error Output 2 = Contamination Output
E/A2 Pin Function	0x0041	65	0	R/W	UInt8	X		X	6 = Antivalent Switching Output	1 = Error Output 2 = Contamination Output 4 = Extern Teach A1 Input 5 = Deactivated 6 = Antivalent Switching Output

A1 (Switching Output)										
A1 Teach-In	0x0200	512	0	W	Uint8			X	—	1 = Do Teach
A1 Teach Mode	0x0290	656	0	W	Uint8	X		X	0 = Minimal 1 = Normal	
A1 Teach Percentage	0x0291	657	0	R/W	Uint8	X			10	6...15 %
A1 Switch Point	0x0270	624	0	R/W	Uint8	X			245	0...245
A1 ON Delay	0x0050	80	0	R/W	Uint16	X			0 ms	0...10000 ms
A1 OFF Delay	0x0060	96	0	R/W	Uint16	X			0 ms	0...10000 ms
A1 NO/NC	0x0210	528	0	R/W	Uint8	X			0 = NO	0 = NO 1 = NC
A1 Polarity	0x0220	544	0	R/W	Uint8	X			P1PK102: 1 P1PK104: 2	0 = PushPull 1 = PNP 2 = NPN
A1 (Error or Contamination Output)										
A1 ON Delay	0x0050	80	0	R/W	Uint16	X			0 ms	0...10000 ms
A1 OFF Delay	0x0060	96	0	R/W	Uint16	X			0 ms	0...10000 ms
A1 NO/NC	0x0210	528	0	R/W	Uint8	X			0 = NO	0 = NO 1 = NC
A1 Polarity	0x0220	544	0	R/W	Uint8	X			P1PK102: 1 P1PK104: 2	0 = PushPull 1 = PNP 2 = NPN
A2 (Error or Contamination Output)										
A2 ON Delay	0x0051	81	0	R/W	Uint16	X			0 ms	0...10000 ms
A2 OFF Delay	0x0061	97	0	R/W	Uint16	X			0 ms	0...10000 ms
A2 NO/NC	0x0211	529	0	R/W	Uint8	X			0 = NO	0 = NO 1 = NC
A2 Polarity	0x0221	545	0	R/W	Uint8	X			P1PK102: 1 P1PK104: 2	0 = PushPull 1 = PNP 2 = NPN
A2 (Antivalent)										
A2 Polarity	0x0221	545	0	R/W	Uint8	X			P1PK102: 1 P1PK104: 2	0 = PushPull 1 = PNP 2 = NPN
E2 (Teach Input)										
Input Ub active/inactive	0x0260	608	0	R/W	Uint8	X			0 = Ub active	0 = Ub active 1 = Ub inactive
Device Test										
Test Mode	0x0310	784	0	R/W	Uint8		X		0	0 = OFF 1 = ON
Test Output A1	0x0317	791	0	R/W	Uint8		X		0	0 = OFF 1 = ON
Test Input E2	0x0313	787	0	R	Uint8		X		0	0 = OFF 1 = ON
Test Error	0x0314	788	0	R/W	Uint8		X		0	0 = OFF 1 = ON
Test Contamination	0x0315	789	0	R/W	Uint8		X		0	0 = OFF 1 = ON
Test Measured Value	0x0316	790	0	R/W	Uint8		X		245	0...245