

P1KKxxx

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: 2.4

Status: 29.11.2023

www.wenglor.com

IO-Link P1KKxxx

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)
P1KK002	0x2A0B65	2755429	2A 0B 65	42 11 101
P1KK004	0x2A0B67	2755431	2A 0B 67	42 11 103
P1KK008	0x2A0B6B	2755435	2A 0B 6B	42 11 107
P1KK009	0x2A0B6C	2755436	2A 0B 6C	42 11 108

IO-Link Version: V 1.1
Data Storage: Yes
Blockparameter: Yes
Min Cycle Time: 3,0 ms
SIO-Mode: Yes
COM-Mode: COM2

Process data (Length: 24 Bit)

Subindex	Name	Bit Offset	Datatype	Range
1	A1 Output	0	Bool	0 = Off 1 = On
2	Signal Warning	1	Bool	0 = False 1 = True
3	---	2	---	---
4	---	3	---	---
5	Short Circuit	4	Bool	0 = False 1 = True
6	---	5	---	---
7	Overtemperature	6	Bool	0 = False 1 = True
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	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				P1KKxxx	
Product ID	0x0013	19	0	R	String				P1KKxxx	
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
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 A2 Input 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	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	Sint16	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			1 = PNP: P1KK002, P1KK008 2 = NPN: P1KK004, P1KK009	0 = PushPull 1 = PNP 2 = NPN

Name	Index (hex)	Index (dec)	Sub-index	R/W	Data-type	Data Storage	Dy-namic	Modify others	Default value	Range
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			1 = PNP: P1KK002, P1KK008 2 = NPN: P1KK004, P1KK009	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			1 = PNP: P1KK002, P1KK008 2 = NPN: P1KK004, P1KK009	0 = PushPull 1 = PNP 2 = NPN
A2 (Antivalent)										
A2 Polarity	0x0221	545	0	R/W	Uint8	X			1 = PNP: P1KK002, P1KK008 2 = NPN: P1KK004, P1KK009	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