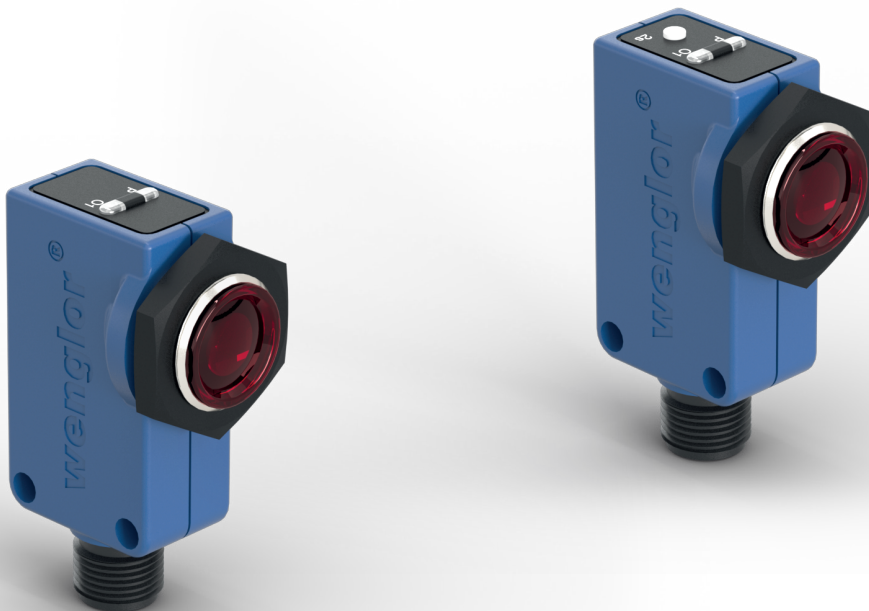


P1RKxxx

Retro-Reflex Sensor for Transparent Objects

High-End



Interface Description

IO-Link P1RKxxx

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)
P1RK002	0x2A0D03	2755843	2A 0D 03	42 13 3
P1RK003	0x2A0D05	2755845	2A 0D 05	42 13 5
P1RK010	0x0000C6	198	00 00 C6	0 0 198
P1RK011	0x0000C7	199	00 00 C7	0 0 199
P1RK012	0x0000C8	200	00 00 C8	0 0 200

IO-Link Version:	V 1.1
Data Storage:	Yes
Blockparameter:	Yes
Min Cycle Time:	3,0 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	Datatype	Range
1	O1 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				P1RKxxx	
Product ID	0x0013	19	0	R	String				P1RKxxx	
Product Text	0x0014	20	0	R	String				Retro-Reflex Sensors 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 = Unlocked	0 = Unlocked 1 = Locked
Device Access Locks. Data Storage Lock	0x000C	12	2	R/W	Bool	X			0 = Unlocked	0 = Unlocked 1 = Locked
Device Access Locks. Local Parameterization (available for P1RK002, P1RK003, P1RK010, P1RK011)	0x000C	12	3	R/W	Bool	X			0 = Unlocked	0 = Unlocked 1 = Locked
Measured Value Settings										
Emitted Light	0x00E0	224	0	R/W	UInt8	X			0 = On	0 = On 1 = Off
Operating Mode	0x0110	272	0	R/W	UInt8	X			0 = Standard	0 = Standard 1 = Speed
Hysteresis	0x0300	768	0	R/W	UInt8	X			0 = Small	0 = Small 1 = Large
Gain	0x0301	769	0	R/W	Bool	X			1 = High	0 = Low 1 = High
Dynamic Readjustment	0x0302	770	0	R/W	Bool	X			1 = On	0 = Off 1 = On
Dynamic Readjustment Storage	0x0303	771	0	R/W	Bool	X			1 = On	0 = Off 1 = On
Dynamic Readjustment Time	0x0304	772	0	R/W	UInt32	X			3600 s: P1RK002, P1RK003 5 s: P1RK010, P1RK011, P1RK012	5...3600 s

Name	Index (hex)	Index (dec)	Sub-index	R/W	Data-type	Data Storage	Dy-namic	Modify others	Default value	Range
Pin Function										
O1 Pin Function	0x0040	64	0	R/W	Uint8	X		X	0 = Switching Output	0 = Switching Output 1 = Error Output 2 = Contamination Output
I/O2 Pin Function (available for P1RK002, P1RK003)	0x0041	65	0	R/W	Uint8	X		X	4 = Extern Teach O1	1 = Error Output 2 = Contamination Output 4 = Extern Teach O1 6 = Antivalent Switching Output
I/O2 Pin Function (available for P1RK010, P1RK011, P1RK012)	0x0041	65	0	R/W	Uint8	X		X	4 = Extern Reset O1	1 = Error Output 2 = Contamination Output 4 = Extern Reset O1 6 = Antivalent Switching Output
O1 Settings (Switching Output)										
O1 Teach-In	0x0200	512	0	W	Uint8			X	—	1 = Teach-in
O1 Teach Mode	0x0290	656	0	R/W	Uint8	X			0 = Minimal	0 = Minimal 1 = Normal
O1 Teach Percentage	0x0291	657	0	R/W	Uint8	X			10	6...15 %
O1 Switch Point	0x0270	624	0	R/W	Uint8	X			245	0...245
O1 ON Delay	0x0050	80	0	R/W	Uint16	X			0 ms	0...10000 ms
O1 OFF Delay	0x0060	96	0	R/W	Uint16	X			0 ms	0...10000 ms
O1 NO/NC	0x0210	528	0	R/W	Uint8	X			0 = NO: P1RK010, P1RK011 1 = NC: P1RK002, P1RK003, P1RK012	0 = NO 1 = NC
O1 PNP/NPN	0x0220	544	0	R/W	Uint8	X			1 = PNP: P1RK002, P1RK010, P1RK012 2 = NPN: P1RK003, P1RK011	0 = PushPull 1 = PNP 2 = NPN
O1 Settings (Error or Contamination Output)										
O1 ON Delay	0x0050	80	0	R/W	Uint16	X			0 ms	0...10000 ms
O1 OFF Delay	0x0060	96	0	R/W	Uint16	X			0 ms	0...10000 ms
O1 NO/NC	0x0210	528	0	R/W	Uint8	X			0 = NO: P1RK010, P1RK011 1 = NC: P1RK002, P1RK003, P1RK012	0 = NO 1 = NC
O1 PNP/NPN	0x0220	544	0	R/W	Uint8	X			1 = PNP: P1RK002, P1RK010, P1RK012 2 = NPN: P1RK003, P1RK011	0 = PushPull 1 = PNP 2 = NPN
O2 Settings (Error or Contamination Output)										
O2 ON Delay	0x0051	81	0	R/W	Uint16	X			0 ms	0...10000 ms
O2 OFF Delay	0x0061	97	0	R/W	Uint16	X			0 ms	0...10000 ms
O2 NO/NC	0x0211	529	0	R/W	Uint8	X			0 = NO: P1RK010, P1RK011 1 = NC: P1RK002, P1RK003, P1RK012	0 = NO 1 = NC

Name	Index (hex)	Index (dec)	Sub-index	R/W	Data-type	Data Storage	Dy-namic	Modify others	Default value	Range
O2 PNP/NPN	0x0221	545	0	R/W	Uint8	X			1 = PNP: P1RK002, P1RK010, P1RK012 2 = NPN: P1RK003, P1RK011	0 = PushPull 1 = PNP 2 = NPN
O2 Settings (Antivalent Switching Output)										
O2 PNP/NPN	0x0221	545	0	R/W	Uint8	X			1 = PNP: P1RK002, P1RK010, P1RK012 2 = NPN: P1RK003, P1RK011	0 = PushPull 1 = PNP 2 = NPN
I2 Settings (Teach or Reset 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 = Off	0 = Off 1 = On
Test Output O1	0x0317	791	0	R/W	Uint8		X		0 = Off	0 = Off 1 = On
Test Input I2	0x0313	787	0	R	Uint8		X		0 = Off	0 = Off 1 = On
Test Error	0x0314	788	0	R/W	Uint8		X		0 = Off	0 = Off 1 = On
Test Contamination	0x0315	789	0	R/W	Uint8		X		0 = Off	0 = Off 1 = On
Test Signal	0x0316	790	0	R/W	Uint8		X		255	0...255