

EN

P1RLxxx

Retro-Reflex Sensors



Interface Description

Subject to change without notice
Available as PDF version only
Version: 1.0.0
Status: 03.07.2024
www.wenglor.com

IO-Link P1RLxxx

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)
P1RL002	0x2A0D06	2755846	2A 0D 06	42 13 6
P1RL003	0x2A0D07	2755847	2A 0D 07	42 13 7

IO-Link Version:	V 1.1
Data Storage:	No
Blockparameter:	No
Min Cycle Time:	4,8 ms
SIO-Mode:	Yes
COM-Mode:	COM2
ISDU:	No
Process data In (Device to Master):	16 Bit
Process data Out (Master to Device):	—

Process data (Length: 16 Bit)

Subindex	Name	Bit Offset	Length	Range
1	A1 Output	0	1 Bit	0 = Off 1 = On
2	Contamination	1	1 Bit	0 = Off 1 = On
3	---			
4	---			
5	Short-circuit	4	1 Bit	0 = Off 1 = On
6	---			
7	Overtemperature	6	1 Bit	0 = Off 1 = On
8	Memory Busy	7	1 Bit	0 = Off 1 = On
9	Signal	8...15	Uint8	0...255

Octet 0

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

Octet 1

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	Datatype	Default value	Range
Identification							
Parameter.Serial number	0x0001	1	12...15	R	Uint32	-	
Direct Parameters 1. Vendor ID 1	0x0000	0	8	R	Uint8	0	
Direct Parameters 1. Vendor ID 2	0x0000	0	9	R	Uint8	87	
Direct Parameters 1. Device ID 1	0x0000	0	10	R	Uint8	-	
Direct Parameters 1. Device ID 2	0x0000	0	11	R	Uint8	-	
Direct Parameters 1. Device ID 3	0x0000	0	12	R	Uint8	-	
Parameter							
OFF Delay	0x0001	1	4 (Bit0...2)	R/W	Uint3	0 = Off	0 = Off 1 = 2 ms 2 = 5 ms 3 = 10 ms 4 = 20 ms 5 = 50 ms 6 = 100 ms 7 = 200 ms
ON Delay	0x0001	1	4 (Bit3...5)	R/W	Uint3	0 = Off	0 = Off 1 = 2 ms 2 = 5 ms 3 = 10 ms 4 = 20 ms 5 = 50 ms 6 = 100 ms 7 = 200 ms
Operating Mode	0x0001	1	4 (Bit7)	R/W	Boolean	0 = Standard	0 = Standard 1 = Speed
Switch Point	0x0001	1	3	R/W	Uint8	238	0...238
A1 NO/NC	0x0001	1	2 (Bit0)	R/W	Boolean	1 = NC	0 = NO 1 = NC
PNP/NPN/Push-Pull	0x0001	1	2 (Bit3...4)	R/W	Uint2	1 = PNP: P1RL002 2 = NPN: P1RL003	0 = Push-Pull 1 = PNP 2 = NPN
Hysteresis	0x0001	1	2 (Bit6)	R/W	Boolean	0 = Small	0 = Small 1 = Large
Emitted Light	0x0001	1	2 (Bit7)	R/W	Boolean	0 = On	0 = On 1 = Off
Teach Mode	0x0001	1	1 (Bit0)	R/W	Boolean	0 = Normal Teach	0 = Normal Teach 1 = Minimal Teach
Teach Button Lock	0x0001	1	1 (Bit5)	R/W	Boolean	0 = Button Not Locked	0 = Button Not Locked 1 = Button Locked
Teach	0x0001	1	1 (Bit7)	R/W	Boolean	0 = No Action	0 = No Action 1 = Start Teach