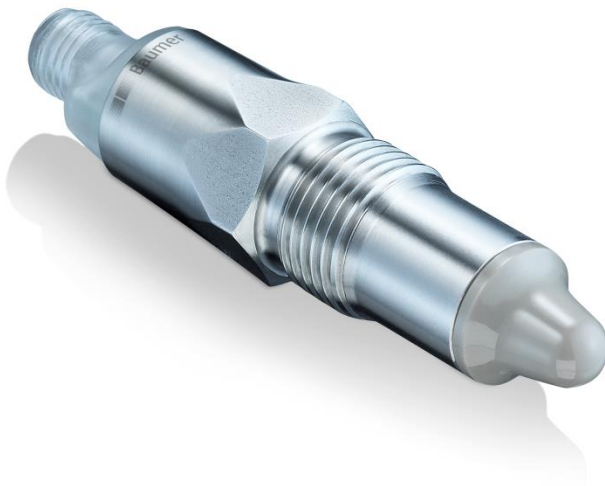


Parameter and Process Data

PL20x-1####.1#####.#####

Adaptive trigger



IO-Link

PL20x-1####.1#####.#####

Device ID

Product	Hex	Decimal
PL20x-1####.1#####.#####	0x03F3	1011

IO-Link Version: V 1.1
 Data Storage: Yes
 Block Parameter: Yes
 Min. Cycle Time: 6.4 ms
 SIO-Mode: Yes
 COM-Mode: 38400 bit/s (COM 2)

Process Data (Length: 24 Bit)

Subindex	Bit offset	Name	Length	Type	Range
1	19	Short circuit wire 2	1 bit	Boolean	0 = no short circuit 1 = short circuit
2	18	Quality bit	1 bit	Boolean	0 = good output quality 1 = bad output quality
3	17	Switch 1 output	1 bit	Boolean	0 = false/off 1 = true/on
4	16	Switch 2 output	1 bit	Boolean	0 = false/off 1 = true/on
5	0	Measurement values	16 bit	Uint	0 - 1000

Octet 0

Bit Offset	23	22	21	20	19	18	17	16
Subindex		-	-	-	Short circuit wire 2	Quality bit	Switch output 1	Switch output 2

Octet 1

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

Octet 2

Bit Offset	7	6	5	4	3	2	1	0
Subindex	Measurement data							

Index	Subindex	Access	SPDU name	Number of Bytes	Format	Range of values	Definition
System commands							
2	0	W	System Command	1	U08		Command Code Definition Public: 0x00 – 0x9F Vendor specific 0xA0 – 0xFF - <u>64 (0x40)</u> : QTeach, press 1 = start Teach, press 2 = Measure and store. - <u>130 (0x82)</u> : Factory Reset. - <u>160 (0xA0)</u> : Teach Air. - <u>161 (0xA1)</u> : Teach Media channel 1 - <u>162 (0xA2)</u> : Teach Media channel 2 - <u>163 (0xA3)</u> : Adaptive trigger zeroing - <u>164 (0xA4)</u> : Adaptive trigger filled tank state
General information of sensors							
16	0	R	Vendor Name	18	String	ASCII	Baumer A/S
17	0	R	Vendor Text	14	String	ASCII	www.baumer.com
18	0	R	Product Name	22	String	ASCII	<Product Key Internal> (<Product Key External>) PL20x-#####.1#####.#####
19	0	R	Product Id	8	String	ASCII	PL20 type Eg: PL20S
20	0	R	Device Text	64	String Max 64 Chars	ASCII	Sensor specific.
21	0	R	Serial number	19	String	ASCII	Baumer Serial Number Eg: L47327X05078212
22	0	R	Hardware revision	5	String	ASCII	Eg. 01.00
23	0	R	Firmware revision	8	String	ASCII	Eg. 01.00.00
24	0	R/W	Application Specific Tag	32	String	ASCII	The application specific tag can be used by the end user to store data that is specific to the end users application. The value does not influence the sensor operation. Length: 32 bytes.
36	1	R	Status / Diagnosis	1	Uint8	0-0x60	0x00 = OK. 0x01 = Warning mask. 0x02 = Alarm mask. 0x10 = Alarm Signal quality. 0x20 = Alarm short circuit out 1. 0x30 = Alarm short circuit out 2. 0x40 = Alarm EEPROM write error. 0x50 = Alarm ASIC write error. 0x60 = System alarm.
Sensor functions							
58	1	R/W	Teach Channels.Line teach channel	1	Uint8	1, 2, 3, and 128	Read / write of teaching bit for channel 1 and channel 2 0 = Teach Not active 1 = Teach active on Channel 1 2 = Teach active on Channel 2 128 = Teach active on Channel 1 and 2
60	1	R/W	Switch 1 Window trigger.Switching window min.	2	Uint16	0-1000	Read / Write min trigger value for switch 1.
60	2	R/W	Switch 1 Window trigger.Switching window max.	2	Uint16	0-1000	Read / Write max trigger value for switch 1.
61	1	R/W	Switch 1 Config.Switching logic	1	Uint8	0-1	0 = Normally Open - Active High 1 = Normally Closed - Active Low
61	2	R/W	Switch 1 Config.Trigger type	1	Uint8	2, 128	2 = Window Trigger 128 = Adaptive Trigger
62	1	R/W	Switch 2 Window trigger.Switching window min.	2	Uint16	0-1000	Read / Write min trigger value for switch 2.

Index	Subindex	Access	SPDU name	Number of Bytes	Format	Range of values	Definition
62	2	R/W	Switch 2 Window trigger.Switching window max.	2	Uint16	0-1000	Read / Write max trigger value for switch 2.
63	1	R/W	Switch 2 Config.Switching logic	1	Uint8	0-1	0 = Normally Open - Active High 1 = Normally Closed - Active Low
63	2	R/W	Switch 2 Config.Trigger type	1	Uint8	2, 128	2 = Window Trigger 128 = Adaptive Trigger
69	1	R/W	Trigger Hysteresis.Switch 1	2	Uint16	0-500	Read / Write hysteresis for switch 1 trigger.
69	11	R/W	Trigger Hysteresis.Switch 2	2	Uint16	0-500	Read / Write hysteresis for switch 2 trigger.
78	1	R/W	Switching Function.Switch 1	1	Uint8	0-3	0 = PNP 1 = NPN 2 = Push Pull 3 = OFF
78	11	R/W	Switching Function.Switch 2	1	Uint8	0-3	0 = PNP 1 = NPN 2 = Push Pull 3 = OFF 4 = 4-20mA
79	3	R	LED Status Values.LED Color	1	Uint8	0-7	0 = LED OFF 1 = White 2 = Red 3 = Green 4 = Blue 5 = Cyan 6 = Magenta 7 = Yellow 8 = Orange
90	0	R	Graph data	125	Uint8	0x00 - 0xFF	First part of graph data of the frequency sweep performed* [values 0-124]
91	0	R	Graph data	125	Uint8	0x00 - 0xFF	Second part of graph data of the frequency sweep performed* [values 125-249]
92	1	R	3 Point Graph.Low Edge	2	Uint16	0-1000	The low frequency of the graph
92	2	R	3 Point Graph.High Edge	2	Uint16	0-1000	The high frequency of the graph
92	3	R	3 Point Graph.Middle point	2	Uint16	0-1000	Measured frequency
92	4	R	3 Point Graph.Amplitude	2	Uint16	0-1000	The amplitude of the graph
121	2	R/W	Damping.Switch 1 Window Trigger	2	Uint16	0-10000	Window trigger damping in ms
121	12	R/W	Damping.Switch 2 Window Trigger	2	Uint16	0-10000	Window trigger damping in ms
121	22	R/W	Damping.Switch 1 Adaptive Trigger	2	Uint16	0-10000	Adaptive trigger damping in ms
121	32	R/W	Damping.Switch 2 Adaptive Trigger	2	Uint16	0-10000	Adaptive trigger damping in ms
202	1	R/W	Switch Analog Output.4-20mA Reverse	1	Uint8	1-2	1 = Disable 2 = Enable
202	3	R/W	Switch Analog Output.4-20mA Zoom From	2	Uint16	0-1000	Zoom from
202	5	R/W	Switch Analog Output.4-20mA Zoom To	2	Uint16	0-1000	Zoom to
768	1	R/W	Adaptive trigger.Switch 1 Set point low	2	Uint16	0-1000	Set point low for adaptive trigger
768	2	R/W	Adaptive trigger.Switch 1 Set point high	2	Uint16	0-1000	Set point high for adaptive trigger
768	3	R/W	Adaptive trigger.Switch 1 Advanced active	1	Uint8	0, 1, 3	0 = Disabled 1 = Enabled – Steady detection inactive 3 = Enabled – Steady detection active
768	4	R/W	Adaptive trigger.Switch 1 Trigger Distance	2	Uint16	5-500	Change trigger distance for adaptive trigger
768	5	R/W	Adaptive trigger.Switch 1 Start Level	2	Uint16	0-1000	Startup level of adaptive trigger
768	11	R/W	Adaptive trigger.Switch 2 Set point low	2	Uint16	0-1000	Set point low for adaptive trigger
768	12	R/W	Adaptive trigger.Switch 2 Set point high	2	Uint16	0-1000	Set point high for adaptive trigger
768	13	R/W	Adaptive trigger.Switch 2 Advanced active	1	Uint8	0, 1, 3	0 = Disabled 1 = Enabled – Steady detection inactive 3 = Enabled – Steady detection active
768	14	R/W	Adaptive trigger.Switch 2 Trigger Distance	2	Uint16	5-500	Change trigger distance for adaptive trigger
768	15	R/W	Adaptive trigger.Switch 2 Start Level	2	Uint16	0-1000	Startup level of adaptive trigger