

Parameter and Process Data

PAC50x



IO-Link

PAC50x-1430###D1########.#0##

Device ID

Product	Hex	Decimal
PAC50x	0x03FD	1021

IO-Link Version: V 1.1
 Data Storage: Yes
 Block Parameter: Yes
 Min. Cycle Time: 14 ms
 SIO-Mode: Yes
 COM-Mode: Yes

Process Data (Length: 128 Bit)

Subindex	Bit Offset	Name	Data type	Bit length	Range
1	126-127	Temperature unit	Uint	2 bit	0 = Fahrenheit 1 = Celsius
2	122	Active Alarms	Boolean	1 bit	0 = false/off 1 = true/on
3	121	Switch Output 2	Boolean	1 bit	0 = false/off 1 = true/on
4	120	Switch Output 1	Boolean	1 bit	0 = false/off 1 = true/on
5	104	Current out channel 1	Uint	16 bit	0 - 23000µA
6	88	Current out channel 2	Uint	16 bit	0 - 23000µA
7	72	Media Temperature	Int	16 bit	-320.00 - 320.00 °C/°F
8	40	Conductivity value	Float	32 bit	>0 mS
9	8	Concentration value	Float	32 bit	>0 %
10	0	Active range	Uint	8 bit	1-2

Octet 0

Bit Offset	127	126	-	-	-	122	121	120
	Temp unit					Alarms	SW2	SW1

Octet 1

Bit Offset	119	118	117	116	115	114	113	112
	Current out channel 1							

Octet 2

Bit Offset	111	110	109	108	107	106	105	104
	Current out channel 1							

Octet 3

Bit Offset	103	102	101	100	99	98	97	96
	Current out channel 2							

Octet 4

Bit Offset	95	94	93	92	91	90	89	88
	Current out channel 2							

Octet 5

Bit Offset	87	86	85	84	83	82	81	80
	Media Temperature							

Octet 6

Bit Offset	79	78	77	76	75	74	73	72
	Media Temperature							

Octet 7

Bit Offset	71	70	69	68	67	66	65	64
	Conductivity value							

Octet 8

Bit Offset	63	62	61	60	59	58	57	56
	Conductivity value							

Octet 9

Bit Offset	55	54	53	52	51	50	49	48
	Conductivity value							

Octet 10

Bit Offset	47	46	45	44	43	42	41	40
	Conductivity value							

Octet 11

Bit Offset	39	38	37	36	35	34	33	32
	Concentration value							

Octet 12

Bit Offset	31	30	29	28	27	26	25	24
	Concentration value							

Octet 13

Bit Offset	23	22	21	20	19	18	17	16
	Concentration value							

Octet 14

Bit Offset	15	14	13	12	11	10	9	8
	Concentration value							

Octet 15

Bit Offset	7	6	5	4	3	2	1	0
	Active range							

Index	Subindex	Name	Data type	Access rights	Byte length	Value range	Description
System commands							
2	0	System Command	UInt8	W	1		Command Code Definition Public: 0x00 – 0x9F Vendor specific 0xA0 – 0xFF
							- <u>130 (0x82)</u> : Factory Reset.
							- <u>160 (0xA0)</u> : Calibrated Temperature Sensor
							- <u>161 (0xA1)</u> : Calibrate Conductivity Sensor
							- <u>162 (0xA2)</u> : Reset User Calibration
							- <u>163 (0xA3)</u> : Measure Media point 1
							- <u>164 (0xA4)</u> : Measure Media point 2
							- <u>165 (0xA5)</u> : Measure Media point 3
							- <u>167 (0xA7)</u> : Calibrate Media in 3 points
							- <u>170 (0xAA)</u> : Calibrate resistor 1
- <u>171 (0xAB)</u> : Calibrate resistor 2							
- <u>172 (0xAC)</u> : Calibrate resistor 3							
General information of sensors							
12	0	Device locks	UInt16	R/W	2		0x0004 = Local parameterization 0x0008 = Local user interface
13	1	Profile Characteristics, DeviceProfileID	UInt16	R	2		0x0001, Smart Sensor Profile
13	2	Profile Characteristics, FunctionClasses	UInt16	R	2		0x4000, Common Profile
13	3	Profile Characteristics, FunctionClasses	UInt16	R	2		0x8000, Identification FunctionClass
13	4	Profile Characteristics, FunctionClasses	UInt16	R	2		0x8001, SSC FunctionClass
13	5	Profile Characteristics, FunctionClasses	UInt16	R	2		0x8002, PDV FunctionClass
13	6	Profile Characteristics, FunctionClasses	UInt16	R	2		0x8003, Diagnosis FunctionClass
13	7	Profile Characteristics, FunctionClasses	UInt16	R	2		0x8100 Extended Identification FunctionClass
14	1	PDInputDescriptor	UInt24	R	3		02 08 00
14	2	PDInputDescriptor	UInt24	R	3		04 20 08
14	3	PDInputDescriptor	UInt24	R	3		04 20 28
14	4	PDInputDescriptor	UInt24	R	3		02 10 48
14	5	PDInputDescriptor	UInt24	R	3		02 10 58
14	6	PDInputDescriptor	UInt24	R	3		02 10 68

14	7	PDInputDescriptor	Uint24	R	3		01 06 78
14	8	PDInputDescriptor	Uint24	R	3		02 02 7E
16	0	Vendor Name	String	R	18	ASCII	Baumer
17	0	Vendor Text	String	R	14	ASCII	www.baumer.com
18	0	Product Name	String	R	32	ASCII	Baumer Article PAC50x
19	0	Product Id	String	R	16	ASCII	Baumer Article Family (IODD match) PAC50
20	0	Device Text	String Max 64 Chars	R	64	ASCII	Sensor specific.
21	0	Serial number	String	R	16	ASCII	Serial Number Eg: K46227X04014251
22	0	Hardware Revision	String	R	16	ASCII	Hardware Revision Eg. 00.00.01 Length: Max 16.
23	0	Software Revision	String	R	16	ASCII	Software Revision Eg. 00.00.04 Length: Max 16.
24	0	Application Specific Tag	String	R/W	16	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: Max 16.
25	0	Function Specific Tag	String	R/W	32	ASCII	The function 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: Max 32.
26	0	Location Tag	String	R/W	32	ASCII	The location 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: Max 32.
36	1	Status / Diagnosis	Uint8	R	1	0-0xFF	0x00 = OK. 0x01 = Maintenance-Required 0x02 = Out-of-Specification 0x03 = Functional-Check 0x04 = Failure 0x05-0xFF = Reserved
37	0	Detailed Device Status[0]	Uint8	R	3		
			Uint16				0x5010 COMPONENT MALFUNCTION
		Detailed Device Status[1]	Uint8		3		
			Uint16				0x4210 TEMP HIGH

		Detailed Device Status[2]	Uint8		3		
			Uint16				0x5000 HW FAULT
		Detailed Device Status[3]	Uint8		3		
			Uint16				0x2001
		Detailed Device Status[4]	Uint8		3		
			Uint16				0x2000
		Detailed Device Status[5]	Uint8		3		
			Uint16				0xFF91 DS UPLOAD REQ
		Detailed Device Status[6]	Uint8		3		
			Uint16				0x5600 ISDU ERROR
		Detailed Device Status[7]	Uint8		3		
			Uint16				0x5800 ISDU ILLEGAL
86	1	Part Number	String	R	16	ASCII	Part article number / Material number
104	4	User Date, Day	Uint8	R/W	1	1-31	A user write and readable day tag
104	5	User Date, Month	Uint8	R/W	1	1-12	A user write and readable month tag
104	6	User Date, Year	Uint16	R/W	2	1900-2100	A user write and readable year tag
118	4	Production Date, Day	Uint8	R	1	1-31	A readable production day tag
118	5	Production Date, Month	Uint8	R	1	1-12	A readable production month tag
118	6	Production Date, Year	Uint16	R	2	1900-2100	A readable production year tag
Sensor functions							
16128	1	Switch 1 trigger value min, Temperature	Float32	R/W	4	-10000-30000	Read / Write min trigger value for switch 1, temperature input. °C*100 / °F*100
16128	2	Switch 1 trigger value max, Temperature	Float32	R/W	4	-10000-30000	Read / Write max trigger value for switch 1, temperature input. °C*100 / °F*100
16129	1	Switch 1 output polarity	Uint8	R/W	1	0-1	Read / Write switch output polarity 0 = High active 1 = Low active
16129	3	Switch 1 trigger frequency hysteresis, Temperature	Uint16	R/W	2	0-65535	Read / Write hysteresis for switch 1 trigger, temperature input. °C*100 / °F*100
16130	1	Switch 2 trigger value min, Temperature	Float32	R/W	4	-10000-30000	Read / Write min trigger value for switch 2, temperature input. °C*100 / °F*100
16130	2	Switch 2 trigger value max, Temperature	Float32	R/W	4	-10000-30000	Read / Write max trigger value for switch 2, temperature input. °C*100 / °F*100
16131	1	Switch 2 output polarity	Uint8	R/W	1	0-1	Read / Write switch output polarity 0 = High active 1 = Low active
16131	3	Switch 2 trigger frequency hysteresis, Temperature	Uint16	R/W	2	0-65535	Read / Write hysteresis for switch 2 trigger, temperature input. °C*100 / °F*100
16132	1	Switch 1 trigger value min, Conductivity range 1	Float32	R/W	4	0-2.0 S/cm	Read / Write min trigger value for switch 1, range select 1.
16132	2	Switch 1 trigger value max, Conductivity range 1	Float32	R/W	4	0-2.0 S/cm	Read / Write max trigger value for switch 1, range select 1.
16133	3	Switch 1 trigger frequency hysteresis, Conductivity range 1	Uint16	R/W	2	0-65535 µS/cm	Read / Write hysteresis for switch 1 trigger, range select 1.
16134	1	Switch 2 trigger value min, Conductivity range 1	Float32	R/W	4	0-2.0 S/cm	Read / Write min trigger value for switch 2, range select 1.

16134	2	Switch 2 trigger value max, Conductivity range 1	Float32	R/W	4	0-2.0 S/cm	Read / Write max trigger value for switch 2, range select 1.
16135	3	Switch 2 trigger frequency hysteresis, Conductivity range 1	Uint16	R/W	2	0-65535 μ S/cm	Read / Write hysteresis for switch 2 trigger, range select 1.
16136	1	Switch 1 trigger value min, Conductivity range 2	Float32	R/W	4	0-2.0 S/cm	Read / Write min trigger value for switch 1, range select 2.
16136	2	Switch 1 trigger value max, Conductivity range 2	Float32	R/W	4	0-2.0 S/cm	Read / Write max trigger value for switch 1, range select 2.
16137	3	Switch 1 trigger frequency hysteresis, Conductivity range 2	Uint16	R/W	2	0-65535 μ S/cm	Read / Write hysteresis for switch 1 trigger, range select 2.
16138	1	Switch 2 trigger value min, Conductivity range 2	Float32	R/W	4	0-2.0 S/cm	Read / Write min trigger value for switch 2, range select 2.
16138	2	Switch 2 trigger value max, Conductivity range 2	Float32	R/W	4	0-2.0 S/cm	Read / Write max trigger value for switch 2, range select 2.
16139	3	Switch 2 trigger frequency hysteresis, Conductivity range 2	Uint16	R/W	2	0-65535 μ S/cm	Read / Write hysteresis for switch 2 trigger, range select 2.
16140	1	Switch 1 trigger value min, Concentration range 1	Float32	R/W	4	0-10000	Read / Write min trigger value for switch 1, range select 1. %*10
16140	2	Switch 1 trigger value max, Concentration range 1	Float32	R/W	4	0-10000	Read / Write max trigger value for switch 1, range select 1. %*10
16141	3	Switch 1 trigger frequency hysteresis, Concentration range 1	Uint16	R/W	2	0-65535	Read / Write hysteresis for switch 1 trigger, range select 1. %*10
16142	1	Switch 2 trigger value min, Concentration range 1	Float32	R/W	4	0-10000	Read / Write min trigger value for switch 2, range select 1. %*10
16142	2	Switch 2 trigger value max, Concentration range 1	Float32	R/W	4	0-10000	Read / Write max trigger value for switch 2, range select 1. %*10
16143	3	Switch 2 trigger frequency hysteresis, Concentration range 1	Uint16	R/W	2	0-65535	Read / Write hysteresis for switch 2 trigger, range select 1. %*10
16144	1	Switch 1 trigger value min, Concentration range 2	Float32	R/W	4	0-10000	Read / Write min trigger value for switch 1, range select 2. %*10
16144	2	Switch 1 trigger value max, Concentration range 2	Float32	R/W	4	0-10000	Read / Write max trigger value for switch 1, range select 2. %*10
16145	3	Switch 1 trigger frequency hysteresis, Concentration range 2	Uint16	R/W	2	0-65535	Read / Write hysteresis for switch 1 trigger, range select 2. %*10
16146	1	Switch 2 trigger value min, Concentration range 2	Float32	R/W	4	0-10000	Read / Write min trigger value for switch 2, range select 2. %*10
16146	2	Switch 2 trigger value max, Concentration range 2	Float32	R/W	4	0-10000	Read / Write max trigger value for switch 2, range select 2. %*10
16147	3	Switch 2 trigger frequency hysteresis, Concentration range 2	Uint16	R/W	2	0-65535	Read / Write hysteresis for switch 2 trigger, range select 2. %*10
74	1	Temperature unit	Uint16	R/W	2	13-14	Read / Write temperature unit 13 = °C. 14 = F.
77	1	Measurement mode. Select between conductivity and concentration.	Uint8	R/W	1	1-2	Read / Write measurement mode 1 = Conductivity 2 = Concentration
78	1	Switch 1 output mode	Uint8	R/W	1	0-3	Read / Write switch output mode 0 = OFF. 1 = Push-Pull. 2 = PNP 3 = NPN.

78	15	Switch 1 alarm behavior	Uint8	R/W	2	0-4	Read / Write switch alarm behavior 0 = No alarm behavior 1 = High-active 2 = Low-active 3 = OFF (High imp.) 4 = Freeze
78	11	Switch 2 output mode	Uint8	R/W	1	0-4	Read / Write switch output mode 0 = OFF. 1 = Push-Pull. 2 = PNP 3 = NPN 4 = Analogue 4-20mA
78	15	Switch 2 alarm behavior	Uint8	R/W	2	0-4	Read / Write switch alarm behavior 0 = No alarm behavior 1 = High-active 2 = Low-active 3 = OFF (High imp.) 4 = Freeze
78	22	SEL-pin input mode	Uint16	R/W	2	0-1	Read / Write SEL-pin input mode 0 = Range select. 1 = Iout source select
85	1	Switch 1 Source selection	Uint8	R/W	1	0-2	Read / Write switch source selection 0 = Conductivity 1 = Concentration 2 = Temperature
85	11	Switch 2 Source selection	Uint8	R/W	1	0-2	Read / Write switch source selection 0 = Conductivity 1 = Concentration 2 = Temperature
105	1	User offset, conductivity	Float32	R/W	4	-2.0-2.0 S/cm	Read / Write offset of measured conductivity value
105	11	User offset, temperature	Float32	R/W	4	-20000-20000	Read / Write offset of measured process temperature value. °C*100 / °F*100
116	1	Iout 4-20mA source selection	Uint8	R/W	1	0-1	Read / Write 4-20mA source selection 0 = Conductivity/Concentration 1 = Temperature
121	2	Switch 1 Response Delay Time	Uint32	R/W	4	0-30000 ms	Read / Write the switching delay time in milliseconds for Switch 1
121	12	Switch 2 Response Delay Time	Uint32	R/W	4	0-30000 ms	Read / Write the switching delay time in milliseconds for Switch 2
121	22	Conductivity Response Delay Time	Uint32	R/W	4	0-30000 ms	Read / Write the response delay time in milliseconds for Conductivity input
121	32	Temperature Response Delay Time	Uint32	R/W	4	0-30000 ms	Read / Write the response delay time in milliseconds for Temperature input
202	2	Fixed analogue output current, 4-20mA	Uint32	R/W	4	3500-23000 µA	Read / Write output current for fixed output. (0 is disable)
208	1	Device Temperature, Current	Float32	R	4	°C/°F	A readable device ambient temperature.

208	4	Device Temperature, Lifetime min.	Float32	R	4	°C/°F	A readable device ambient minimum lifetime temperature.
208	5	Device Temperature, Lifetime max.	Float32	R	4	°C/°F	A readable device ambient maximum lifetime temperature.
211	1	Device operation time, power on	Uint32	R	4	s	A readable time in seconds since power up.
211	3	Device operation time, lifetime	Uint32	R	4	s	A readable total operation time in seconds.
214	1	Process Temperature, Current	Float32	R	4	°C/°F	A readable process temperature.
214	4	Process Temperature, Lifetime min.	Float32	R	4	°C/°F	A readable process minimum lifetime temperature.
214	5	Process Temperature, Lifetime max.	Float32	R	4	°C/°F	A readable process maximum lifetime temperature.
216	1	Process Value, Current	Float32	R	4	S/cm	A readable measured conductivity value.
224	2	Power cycles, Lifetime	Uint32	R	4	-	A readable number of restarts of the device.
401	1	Calibrated resistors area 1, Calibrated value pt1	Float32	R/W	4	0-2000000 Ω	Readable value from last calibration via cmd 170. Write should only be used for restoring backup.
401	2	Calibrated resistors area 1, Calibrated value pt2	Float32	R/W	4	0-2000000 Ω	Readable value from last calibration via cmd 171. Write should only be used for restoring backup.
401	3	Calibrated resistors area 1, Calibrated value pt3	Float32	R/W	4	0-2000000 Ω	Readable value from last calibration via cmd 172. Write should only be used for restoring backup.
402	1	Measured resistors area 1, Measured value pt1	Float32	R/W	4	0-2000000 Ω	Readable value from last calibration via cmd 170. Write should only be used for restoring backup.
402	2	Measured resistors area 1, Measured value pt2	Float32	R/W	4	0-2000000 Ω	Readable value from last calibration via cmd 171. Write should only be used for restoring backup.
402	3	Measured resistors area 1, Measured value pt3	Float32	R/W	4	0-2000000 Ω	Readable value from last calibration via cmd 172. Write should only be used for restoring backup.
404	1	Calibrated resistors area 2, Calibrated value pt1	Float32	R/W	4	0-2000000 Ω	Readable value from last calibration via cmd 170. Write should only be used for restoring backup.
404	2	Calibrated resistors area 2, Calibrated value pt2	Float32	R/W	4	0-2000000 Ω	Readable value from last calibration via cmd 171. Write should only be used for restoring backup.
404	3	Calibrated resistors area 2, Calibrated value pt3	Float32	R/W	4	0-2000000 Ω	Readable value from last calibration via cmd 172. Write should only be used for restoring backup.
405	1	Measured resistors area 2, Measured value pt1	Float32	R/W	4	0-2000000 Ω	Readable value from last calibration via cmd 170. Write should only be used for restoring backup.
405	2	Measured resistors area 2, Measured value pt2	Float32	R/W	4	0-2000000 Ω	Readable value from last calibration via cmd 171. Write should only be used for restoring backup.
405	3	Measured resistors area 2, Measured value pt3	Float32	R/W	4	0-2000000 Ω	Readable value from last calibration via cmd 172. Write should only be used for restoring backup.

407	1	Calibrated resistors area 3, Calibrated value pt1	Float32	R/W	4	0- 2000000 Ω	Readable value from last calibration via cmd 170. Write should only be used for restoring backup.
407	2	Calibrated resistors area 3, Calibrated value pt2	Float32	R/W	4	0- 2000000 Ω	Readable value from last calibration via cmd 171. Write should only be used for restoring backup.
407	3	Calibrated resistors area 3, Calibrated value pt3	Float32	R/W	4	0- 2000000 Ω	Readable value from last calibration via cmd 172. Write should only be used for restoring backup.
408	1	Measured resistors area 3, Measured value pt1	Float32	R/W	4	0- 2000000 Ω	Readable value from last calibration via cmd 170. Write should only be used for restoring backup.
408	2	Measured resistors area 3, Measured value pt2	Float32	R/W	4	0- 2000000 Ω	Readable value from last calibration via cmd 171. Write should only be used for restoring backup.
408	3	Measured resistors area 3, Measured value pt3	Float32	R/W	4	0- 2000000 Ω	Readable value from last calibration via cmd 172. Write should only be used for restoring backup.
1024	1	Display Control Values, PV1	UInt8	R	1	64, 128	A readable number to runtime determine if system is measuring conductivity (64) or concentration (128)
1024	2	Display Control Values, PV2	UInt8	R	1	1, 2	A readable number to runtime determine if system is configured using °C (1) or °F (2)
11008	1	ConductivityConcentrationTable range 1 Length	UInt8	R/W	1	2-30	Read / Write length of conductivity to concentration table
11008	2	ConductivityConcentrationTable range 1 Label	String	R/W	16	ASCII	Read / Write label of conductivity to concentration table
11008	9+N*2	ConductivityConcentrationTable range 1 Conductivity N*	Float32	R/W	4	0-1.15 S/cm	Read / Write conductivity for entry N (1-30)
11008	10+N*2	ConductivityConcentrationTable range 1 oncentration N*	UInt16	R/W	2	0-10000	Read / Write concentration for entry N (1- 30).
11009	1	ConductivityConcentrationTable range 2 Length	UInt8	R/W	1	2-30	Read / Write length of conductivity to concentration table
11009	2	ConductivityConcentrationTable range 2 Label	String	R/W	16	ASCII	Read / Write label of conductivity to concentration table
11009	9+N*2	ConductivityConcentrationTable range 2 Conductivity N*	Float32	R/W	4	0-1.15 S/cm	Read / Write conductivity for entry N (1-30)
11009	10+N*2	ConductivityConcentrationTable range 2 oncentration N*	UInt16	R/W	2	0-10000	Read / Write concentration for entry N (1- 30). %*10
11012	1	Temperature Source	Int8	R/W	1	0, 2	Read / Write temperature source 0 = Sensor tip 2 = Fixed
11012	2	Fixed Temperature	Int16	R/W	2	-4000- 32000	Read / Write fixed temperature, °C*100 / °F*100
11012	3	Range Selection	Int8	R/W	1	0-2	Read / Write forced range selection 0 = Use I/O selection 1 = Select range 1 2 = Select range 2
11012	4	Advanced Mode	Int8	R/W	1	0-1	Read / Write advanced mode activated 0 = Disabled, 1 = Enabled

11013	1	Temperature Coefficient 1, range 1	Float32	R/W	4	0-10.0 %/K	Read / Write temperature coefficient for conductivity temperature correction
11013	2	Temperature Coefficient 2, range 1	Float32	R/W	4	0-10.0 %/K ²	Read / Write temperature coefficient for conductivity temperature correction
11013	3	ReferenceTemperature, range 1	Int16	R/W	2	-4000-32000	Read / Write target temperature for conductivity temperature correction, °C*100 / °F*100
11014	1	Temperature Coefficient 1, range 2	Float32	R/W	4	0-10.0 %/K	Read / Write temperature coefficient for conductivity temperature correction
11014	2	Temperature Coefficient 2, range 2	Float32	R/W	4	0-10.0 %/K ²	Read / Write temperature coefficient for conductivity temperature correction
11014	3	ReferenceTemperature, range 2	Int16	R/W	2	-4000-32000	Read / Write target temperature for conductivity temperature correction, °C*100 / °F*100
11017	1	Conductivity Output Settings Range 1, Min value	Float32	R/W	4	0-1.0 S/cm	Read / Write Conductivity @ 4mA LRV
11017	2	Conductivity Output Settings Range 1, Max value	Float32	R/W	4	0-1.0 S/cm	Read / Write Conductivity @ 20mA URV
11018	1	Conductivity Output Settings Range 2, Min value	Float32	R/W	4	0-1.0 S/cm	Read / Write Conductivity @ 4mA LRV
11018	2	Conductivity Output Settings Range 2, Max value	Float32	R/W	4	0-1.0 S/cm	Read / Write Conductivity @ 20mA URV
11021	1	Concentration Output Settings Range 1, Min value	Float32	R/W	4	0-10000	Read / Write Concentration @ 4mA LRV. %*10
11021	2	Concentration Output Settings Range 1, Max value	Float32	R/W	4	0-10000	Read / Write Concentration @ 20mA URV. %*10
11022	1	Concentration Output Settings Range 2, Min value	Float32	R/W	4	0-10000	Read / Write Concentration @ 4mA LRV. %*10
11022	2	Concentration Output Settings Range 2, Max value	Float32	R/W	4	0-10000	Read / Write Concentration @ 20mA URV. %*10
11025	1	Temperature Output Settings Range 4, Min value	Float32	R/W	4	-4000-32000	Read / Write Temperature @ 4mA LRV. °C*100 / °F*100
11025	2	Temperature Output Settings Range 4, Max value	Float32	R/W	4	-4000-32000	Read / Write Temperature @ 20mA URV. °C*100 / °F*100
11026	1	Lower current limit	UInt16	R/W	2	3500-22500 µA	Read / Write Lower current limit, 4-20mA
11026	2	Upper current limit	UInt16	R/W	2	4000-23000 µA	Read / Write Upper current limit, 4-20mA
11026	3	Current output delay	Float32	R/W	4	0-30000 ms	Read / Write the response delay time in milliseconds for 4-20mA output
11028	2	Current Output Error Indication Value	UInt16	R/W	2	3500-23000 µA	Read / Write analogue value for error indication
11029	2	Label for undefined media	String	R/W	16	ASCII	Read / Write media label
11030	1	Label for media 1	String	R/W	16	ASCII	Read / Write media label
11030	2	Range start, media 1	Float32	R/W	4	0-1.0 S/cm	Read / Write range start
11030	3	Range stop, media 1	Float32	R/W	4	0-1.0 S/cm	Read / Write range stop
11031	1	Label for media 2	String	R/W	16	ASCII	Read / Write media label

11031	2	Range start, media 2	Float32	R/W	4	0-1.0 S/cm	Read / Write range start
11031	3	Range stop, media 2	Float32	R/W	4	0-1.0 S/cm	Read / Write range stop
11032	1	Label for media 3	String	R/W	16	ASCII	Read / Write media label
11032	2	Range start, media 3	Float32	R/W	4	0-1.0 S/cm	Read / Write range start
11032	3	Range stop, media 3	Float32	R/W	4	0-1.0 S/cm	Read / Write range stop
11033	1	Label for media 4	String	R/W	16	ASCII	Read / Write media label
11033	2	Range start, media 4	Float32	R/W	4	0-1.0 S/cm	Read / Write range start
11033	3	Range stop, media 4	Float32	R/W	4	0-1.0 S/cm	Read / Write range stop
11035	1	Temperature Offset Adjustment	Float32	R/W	4	-20000- 20000	Read / Write Temperature offset adjustment. °C*100 / °F*100
11035	2	Conductivity Offset Adjustment	Float32	R/W	4	S/cm	Read / Write Conductivity offset adjustment
11035	3	Media calibration, point 1, conductivity	Float32	R/W	4	S/cm	Read / Write conductivity point 1, for media calibration
11035	4	Media calibration, point 2, conductivity	Float32	R/W	4	S/cm	Read / Write conductivity point 2, for media calibration
11035	5	Media calibration, point 3, conductivity	Float32	R/W	4	S/cm	Read / Write conductivity point 3, for media calibration
11035	6	Media calibration, point 1, temperature	Float32	R/W	4	°C	Read / Write temperature point 1, for media calibration
11035	7	Media calibration, point 2, temperature	Float32	R/W	4	°C	Read / Write temperature point 2, for media calibration
11035	8	Media calibration, point 3, temperature	Float32	R/W	4	°C	Read / Write temperature point 3, for media calibration
11035	9	Installation factor	Float32	R/W	4	0.5- 1.5gg	Read / Write gain/installation factor for compensating for pipe/system influence
11035	10	Calibration parameter, Resistance calibration value	Float32	R/W	4	Ω	Calibration value for resistance calibration
11035	11	Calibration parameter, Resistance range	UInt8	R/W	1	1-3	Calibration range for resistance calibration

* N can be 1-30, and defines the index number in the conversion table.

Display functions

1016	1	Display orientation	UInt8	R/W	1	0,18	Read / Write orientation for display text. 0 = Normal orientation 18 = 180° rotated
1016	3	Max displayed decimals	UInt8	R/W	1	0-3	Read / Write Max trailing digits can be limited 0-3. Display value is dynamic, and can max show 4 digits at large screen (3 trailing at values <10mS and 0 trailing at values >1000mS).
1017	1	Display backlight color	UInt16	R/W	2	0,28,22 4,255	Read / Write background color for main screen 0 = None 28 = Green 224 = Red 255 = White

1017	2	Display backlight intensity	Uint8	R/W	1	10-100%	Backlight intensity
1018	1	Display access, passkey enable	Uint8	R/W	1	0,1	Read / Write enable of passkey when accessing menu. 0 = Disable 1 = Enable
1018	2	Display passkey	Uint32	R/W	4	0-9999	
1019	1	Display language	Uint16	R/W	2	25966, 25697, 25701, 26226	Read / Write display language 25966 = English 25697 = Custom 25701 = German 26226 = French
1019	2	Display layout	Uint8	R/W	1	18-22	Read / Write layout for main screen 18 = Value (large) + details 19 = Value (large) 20 = Value, Temp + Tag 21 = Media label + Tag 22 = Media label + details
1019	3	Display menu timeout	Uint16	R/W	2	0-3600s	Display main page return timeout 0: Disable, 1-3600s
1020	1	Display warning enable	Uint8	R/W	1	0,1	Read / Write enable of warning indications. 0 = Disable 1 = Enable
1020	2	Warning indication, Min value	Float32	R/W	4	0-10000	Read / Write lower value of warning range. Unit is depending on measurement mode. S/cm / %*10
1020	3	Warning indication, Max value	Float32	R/W	4	0-10000	Read / Write upper value of warning range. Unit is depending on measurement mode. S/cm / %*10
1020	4	Warning mode when below defined minimum	Uint8	R/W	1	0-3	Read / Write Warning mode low 0 = Warning with value 1 = Warning with info 2 = Error 3 = Warning with user message
1020	5	Warning mode when above defined maximum	Uint8	R/W	1	0-3	Read / Write Warning mode high 0 = Warning with value 1 = Warning with info 2 = Error 3 = Warning with user message
1020	6	Warning backlight when below defined minimum	Uint16	R/W	2	0, 28, 224, 255, 284, 480, 511	Read / Write layout for main screen 0 = None 28 = Green 224 = Red 255 = White 284 = Green flashing 480 = Red flashing 511 = White flashing

1020	7	Warning backlight when above defined maximum	Uint16	R/W	2	0, 28, 224, 255, 284, 480, 511	Read / Write layout for main screen 0 = None 28 = Green 224 = Red 255 = White 284 = Green flashing 480 = Red flashing 511 = White flashing
1022	2	Error indication, Min value	Float32	R/W	4	0-10000	Read / Write lower value of error range. Unit is depending on measurement mode. S/cm / %*10
1022	3	Error indication, Max value	Float32	R/W	4	0-10000	Read / Write upper value of error range. Unit is depending on measurement mode. S/cm / %*10
1022	4	Error mode when below defined minimum	Uint8	R/W	1	0-3	Read / Write Error mode low 0 = Error with value 1 = Error with info 2 = Error 3 = Error with user message
1022	5	Error mode when above defined maximum	Uint8	R/W	1	0-3	Read / Write Error mode high 0 = Error with value 1 = Error with info 2 = Error 3 = Error with user message
1022	6	Error backlight when below defined minimum	Uint16	R/W	2	0, 28, 224, 255, 284, 480, 511	Read / Write layout for main screen 0 = None 28 = Green 224 = Red 255 = White 284 = Green flashing 480 = Red flashing 511 = White flashing
1022	7	Error backlight when above defined maximum	Uint16	R/W	2	0, 28, 224, 255, 284, 480, 511	Read / Write layout for main screen 0 = None 28 = Green 224 = Red 255 = White 284 = Green flashing 480 = Red flashing 511 = White flashing
1023	0	Warning user message, Min value	String	R/W	16	ASCII	User message used when "3" is selected for 'Warning mode' Length: Max 16.
1023	0	Warning user message, Max value	String	R/W	16	ASCII	User message used when "3" is selected for 'Warning mode' Length: Max 16.