

# All data overview

## Expert Logger

Device Type	100	200	300	400
Analog inputs (mV, mA, TC)	16	32	46	16
Appropriate for RTD's	8	16	23	8
Total sampling rate	1000 Hz	2 groups per 1000 Hz	3 groups per 1000 Hz	1000 Hz
Voltage / current measurement range	±156 mV .. ±10 V / 0 .. 20 mA, 4 .. 20 mA, free			
Current reference for resistance measurement	None, 100 µA, 200 µA or 1 mA software switchable			
Strain gauge voltage ref, 5 VDC ±10 mV	1	1	0	0
Resolution / input impedance	24 bit / 1 GΩ			
Internal reference junctions	yes / 2	yes / 4	yes / 6	yes / 2
Withstand voltage / galvanic isolation	±110 VDC / ± 400 VDC to PE, other channel group			
Measurement accuracy	V/mA: 0.01% of upper range value RTD's: 0.1 K Thermocouples (external thermoblock): 0.3 K Thermocouples (internal reference junction): < 1.0 K			
Analog outputs	0	0	0	6
Resolution	16 bit			
Output ranges	0 .. 12V / ±12V / 0 .. 20 mA / 4 .. 20 mA / free			
Galvanic isolation	±400 VDC to system / PE			

min. load / max. burden	625Ω / 950Ω			
<b>Number of digital channels</b>				
Digital inputs to 1 MHz	3	3	0	0
Digital inputs to 250 Hz	1	1	0	1
Digital outputs	4	4	0	0
Digital inputs / outputs	4	4	1	24
<b>Technical information digital inputs</b>				
Input signal	low: 0 .. 1V / high: 5 .. 100 VDC@3,5 mA			
Frequency range / width counter	0,2 Hz .. 1 MHz, respectively 0,2 Hz .. 250 Hz / 64 bit			
Galvanic isolation	±400 VDC to PE / other channels			
<b>Technical information digital outputs</b>				
Max. switching voltage / current	50V / 2,5A			
PWM function / Pulse duty factor	Basic frequency 5 Hz .. 10 kHz / 1:1000			
Galvanic isolation	±400 VDC to PE, other channels			
<b>Data storage</b>				
Data storage internal	2 .. 14 GB (approx. 30 million measurement values per GB)			
Data storage external	USB, NFS, CIFS, (S)FTP			
<b>Interfaces / protocols</b>				
Sensor bus SDI12	1	1	0	0
COM1 und COM 2	RS485, 9-pole sub-D plug/ASCII, Modbus RTU, PROFIBUS DPV1 Slave			
COM 3	RS485, 9-pole sub-D plug/ASCII, Modbus RTU			
LAN	1000 Base-TX			
WLAN (optional, alternative to WWAN)	802.11 b/g/n			
WWAN (optional, alternative to WLAN)	UMTS, LTE max. 100 Mbit/s			

USB	Device 2.0 Host 2.0 / low / full / high
TCP / IP protocols (LAN, WLAN, WWAN, USB)	Modbus TCP, OPC UA
CAN / RS 232/485	2x CAN 2.0/ Modbus RTU, SCPI, ASCII
<b>General technical information</b>	
Dimensions / weight	H 210 x B 80 x T 125 mm / 750 g
Fixing	Rail mounting DIN EN 60715 or screw fixing
Signal connections	Plug-in screw terminals, 96 terminals in 2 rows, max. 1.5 mm <sup>2</sup>
Temperature range	-20 .. 50° C
Power supply	12 .. 24 VDC / ± 10%
Power input normal mode	max. 10 W
Power input sleep mode	5 mW@12 V, 10 mW@24 V

Registered: 23.04.2018

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