

All data overview

ProfiMessage / ProfiLab

Module type	ADV T / AAST / ADIT	ADGT	AMDT / ADFT
Analog inputs			
Sensors	mv, mA, Thermocouples, RTD (RTD except ADV T)	mv, mA, Thermocouples, RTD	mV, mA
Voltage and current measurement range	± 156 mV .. ± 10 V / 0 .. 20 mA, 4 .. 20 mA		
Galvanic isolation to system	750 VDC		
Galvanic isolation channel to channel	110 V	650 V	100 V
Resolution	24 bit		14 bit
Measurement accuracy	V / mA: 0.01 % from upper range value Pt100: 0.1 K Pt1000: 0.05 K		± 1.25 V .. ± 10 V: ± 0.1 % ± 0.625 V: ± 0.2 % ± 0.312 V: ± 0.3 %

Thermocouples: 0.1 % EW

$\pm 0.156 \text{ V}$: ± 0.4
%

Analog outputs

Resolution	16 bit	-	12 bit
Galvanic isolation	750 V	-	100 V
Output	0/4 .. 20 mA	-	0 .. 10 V
Max. burden / min. load	650 Ω	-	2.5 k Ω

Digital inputs

Galvanic isolation	2.5 kV
Input measurement range	low: 0 .. 1.5 VDC@0 .. 1.5 mA / high: 3.5 .. 90 VDC@2 mA

Frequency / counter inputs

Galvanic isolation / input measurement range	2.5 kV / low: 0 .. 1.5 VDC@0 .. 1.5 mA / high: 3.5 .. 90 VDC@2 mA
Measurement frequency	up to 30 kHz

Digital outputs

Potential isolation	2.5 kV
Switching voltage	max. 50 VDC@2.5 A

Data storage

Internal	2 .. 14 GB (approx. 40 million measurement values per GB / 300 million measurement values per GB for AMDT, ADFT)
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Interfaces

Physical equipment COM 1 / COM 2	RS485, 9-pole sub-D-plug, DIN EN ISO 19245-1
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Physical equipment COM 3 / COM 4	RS232, 9-pole sub-D plugs
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Protocols COM 1 / COM 2	PROFIBUS DPV1 Slave (both interfaces), incl. redundancy according to PNO 2.212 V1.2
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Protocols COM 3 / COM 4	Modbus RTU master / slave, customer-specific protocols, ASCII
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Ethernet	RJ45 (8-pole STP-plug), 100Base-TX; Protocols: TCP/IP, HTTP, SMTP, NTP, Modbus TCP Client / server
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USB	USB 1.1. for configuration and data memory read out
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CAN	9-pole sub-D plug, Protocols: CAN, RAW; baud rates: 50 k .. 1 MBaud
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Module bus

Mechanical type	3-pole Phoenix connector; internal bus to connect additional modules
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Baud rate / length	1 MBaud (adjustable) / up to 10 m
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General technical information

ProfiMessage dimension / weight	200 x 73 x 118 mm / 1 kg
ProfiMessage fixing	Rail mounting DIN EN 60715 or screw fixing
ProfiMessage signal connections	Detachable screw terminals, 33 terminals in 2 rows, lead protection, connecting cabling max. 2.5 mm ²
ProfiLab dimension / weight	226 x 145 x 180 mm / 1 kg
ProfiLab signal connections	Up to 64 4 mm lab plugs, gold-plated
Temperature range	-20 .. 50 °C
Power supply	12 .. 36 VDC / 12 .. 28 VAC eff. / ± 10 %
Power input	< 10 Watt

Registered: 23.04.2018