

Technical specifications

ProfiMessage / ProfiLab

Analog inputs

Voltage range / Current range ± 156 mV ... ± 10 V / 0/4 ... 20 mA

Thermocouples	any, all types, integrated temperature compensation; resistance thermometer Pt100(0), NTC and linear resistance to 10 k Ω (not ADVT)
Potential isolation	750 VDC for system and supply; 400 VDC between channels at ADGT module 2.0; 650 VDC between channels at ADGT module 3.0; 110 VDC between channels in other modules
Resolution	24-Bit (≈ 7 decimal places) precision: V, mA 0.01 % v. accumulated value Pt100 0.1 K; Pt1000 0.01 K; thermocouple 0.1% from accumulated value

Analog outputs

Resolution / potential isolation 16 Bit / 750 V

Output signal 0/4 ... 20 mA at maximum burden 650 Ω

Digital inputs

Potential isolation 2,5 kV

Measurement range low: 0 ... 1.5 VDC@0 ... 1.5 mA / high: 3.5 ... 90 VDC@2 mA

Frequency / counter inputs

Potential isolation 2,5 kV

Measurement range low: 0 ... 1.5 VDC@0 ... 1.5 mA / high: 3.5 ... 90 VDC@2 mA

Measurement frequency up to 30 kHz to TTL-level

Digital outputs

Potential isolation 2.5 kV

Switching voltage max. 50 VDC@2.5 A

Data storage

Standard size / measurement data Storage partitionable, standard: 500 MB; max. 250 million measurement values

Max. size / measurement data 16 GB; up to 1 billion measurement values

Serial interface

Physical equipment COM 1 / COM 2 RS485, 9-pole sub-D connector, DIN EN ISO 19245-1

Physical equipment COM 3 / COM 4 RS232, 9-pole sub-D connector

Protocols COM 1 / COM 2 PROFIBUS DPV1 Slave (both interfaces), also redundant, according PNO 2.212 V1.2

Protocols COM 1 ... COM 4 Modbus RTU Master / Slave, custom specific protocols

Ethernet RJ45 (8-pole STP-socket), 100 BaseT, Protocols: TCP/IP, HTTP, SMTP, NTP, Modbus TCP Client / Server

USB USB 1.1 for configuration and memory download

CAN 9-pole sub-D connector, protocols: CAN, RAW; Baudrate: 50 K ... 1 MBaud

Physical equipment 3-pole Phoenix plugs; internal bus for connecting additional modules

Baud rate / length 1 MBaud (adjustable) / up to 10 m (1 MBaud)

General technical information

ProfiMessage dimensions 200 x 73 x 118 mm

ProfiMessage weight 1 kg

ProfiMessage mounting Rail mounting DIN EN 50023 or screw fixing

ProfiMessage signal connections Deatchable screw terminals, 33 terminals (2-rows), lead protection, connector cable, max. 2.5 mm²

ProfiLab dimensions 226 x 145 x 180 mm

ProfiLab weight 1 kg

ProfiLab signal connections up to 64 4 mm laboratory connectors, gold plated

Temperature range -20 ... +60 °C

Power supply 12 ... 36 VDC / 12 ...28 VAC eff. / ± 10 %, at AMDT/ADFT min. 18 VAC/DC, power input for amster device; < 10 Watt