



4AI/1AO

DIN RAIL

RS-485



- 4 analog inputs (4–20 mA, with independent galvanic isolation for each input)
- 1 analog output (4–20 mA, with galvanic isolation)
- Ethernet port (10Base-T/100Base-TX)
- RS-485 serial port for data sharing (galvanic isolation)
- Diagnostic LEDs
- Standard communication protocols (Modbus RTU, Modbus TCP)
- Remote configuration and firmware update via Ethernet port using the MT telemetry module with an Ethernet port
- Local configuration via Ethernet/USB-C port
- DIN rail mounting capability
- Detachable screw terminal blocks
- 3-Year Warranty



The EX-A41 expansion module is a versatile solution that allows the expansion of telemetry modules to handle additional analog input/output signals. The device features a compact design, making it ideal for installation in spaces with limited room. Its industrial enclosure with a DIN rail mounting system enables easy installation in control cabinets. The detachable screw terminal blocks ensure secure and reliable signal connections and make connections easy without needing specialized tools.

The expander is equipped with four galvanically isolated analog inputs (4-20 mA) and one analog output (4-20 mA). The EX-A41 module can communicate with any Master/Client device supporting Modbus RTU or Modbus TCP standards, ensuring broad compatibility with various systems and devices, not only from the family of telemetry modules. A key advantage of this solution is its ability to be remotely configured and updated via the Ethernet interface.

Resources:

- 4 analog inputs (4-20 mA, galvanic isolation)
- 1 analog output (4-20 mA, galvanic isolation)
- RS-485 serial port (galvanic isolation)
- Ethernet port (10Base-T/100Base-TX)
- Internal non-volatile memory for configuration data with remote update capability
- USB-C port for local configuration and firmware update
- Signal leds

Functionality:

- Access to internal resources using standard Modbus RTU and Modbus TCP protocols
- Programmable alarm levels (4), hysteresis, and filtering constants for analog inputs
- Capability for linear scaling of analog inputs to engineering units
- Detection of sensor malfunction on analog inputs
- Remote configuration and firmware update via local Ethernet network
- Protection against unauthorized access with password
- DIN rail mounting
- Power supply: 12/24V DC
- Detachable screw terminal blocks
- LEDs (module status, input status, transmit/receive activity of communication ports)
- User-friendly configuration tools

General

Dimensions (H x W x D)	52,5 x 86 x 58 mm
Weight	120 g
Mounting method	DIN Rail 35 mm
Working temperature	-25 to +55 °C
Protection class	IP40

Analogue inputs AI1 – AI4

Input type	current, galvanic isolation
Measuring range	4 – 20 mA
Maximum input current	50 mA
Input dynamic impedance	51 Ω typ.
A/D converter resolution	14 bits
Voltage drop at 20 mA	< 5 V
Input accuracy	±0,2 %

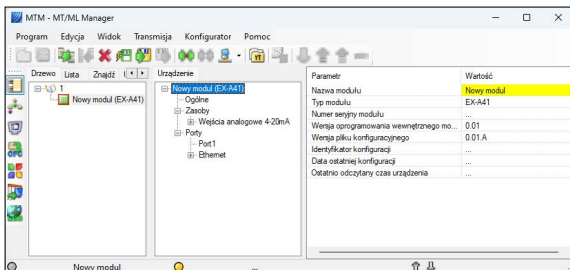
Analogue outputs AQ1

Output type	passive (external power supply required), galvanic isolation
Output range	4 – 20 mA
Output power supply	7,5 – 30 V
Output accuracy	±0,2 %

Power supply

DC voltage	12/24 V DC
Current consumption	TBD

Configuration software



Drawings and dimensions (all dimensions in millimetres)

