

**Digalox® DPM72-MPP2/MPPA2/MPPV2-DIN****Instruction manual (Rev-2026-08)**

Analogue signal measuring instrument for DIN rail

Package contents: Digalox® DPM72, 5 jumpers, 2 instruction manuals (EN + DE)

1. Safety instructions

- Read instruction manual carefully before operating the device! Keep for later reference.
- Mounting and installation must be carried out by suitably qualified and competent persons only.
- **When working on the device hazardous voltages must not be connected to the device!**
- **The device must not be used as the only protective device or protective shutdown.**
- The device is not intended to protect persons or facilities against harm. Specific devices must be used to guarantee safety (protection relays, cut-off switches, etc.).
- Do not open the housing!
- Do not use the device in the presence of explosive or flammable substances!
- All cables carrying hazardous voltages must be secured with external separators.

2. Meaning of symbols

General warning sign
(Attention, observe the documentation!)



Warning of an electrical hazard

3. Intended use

- Measurement of current and voltage in the specified measuring ranges for process signals.
- Indoor use non condensing, non corrosive.
- Mounting on DIN rail or screwing on.
- Failure to comply with these instructions will void all guarantee and warranty.

4. Description

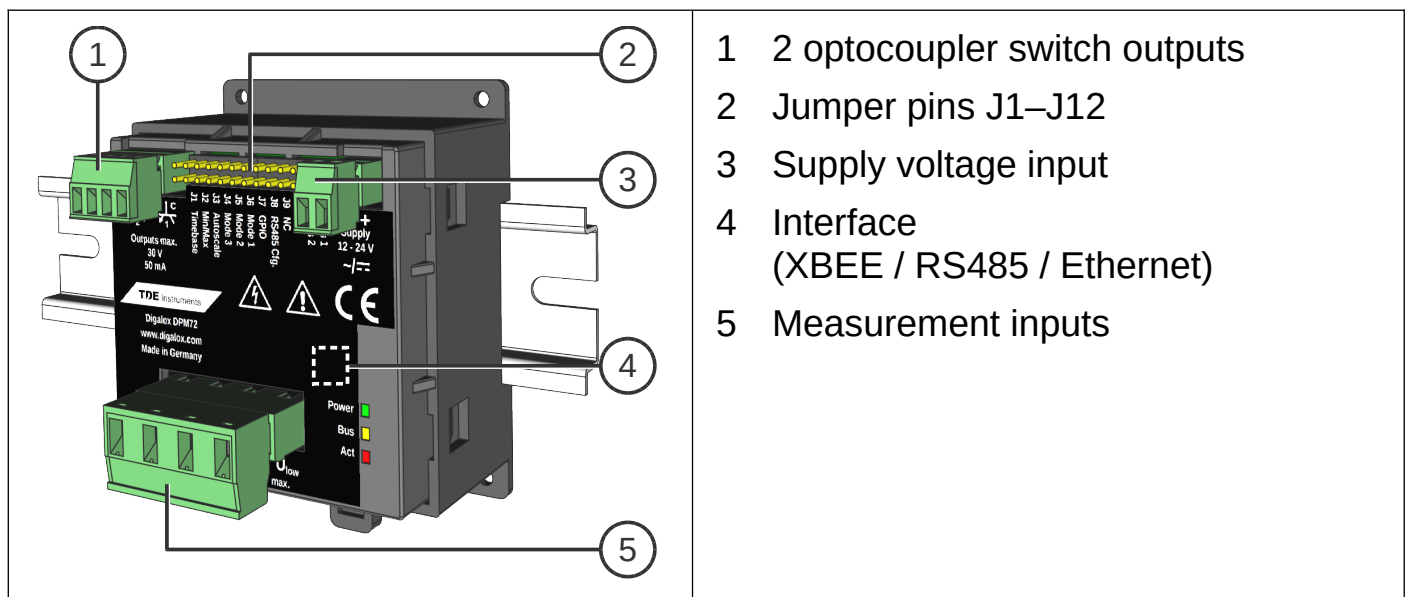
Depending on the model, the measurement modes analogue signal (2×) 0/2 to 10 V and/or (2×) 0/4 to 20 mA AC/DC are supported. Measured values are recorded over a time span of 36 seconds up to 14 days. The measured values remain stored as long as the device is supplied with voltage. Two optocoupler switching outputs enable the device to perform switching operations when threshold values are reached.

Using the “Digalox® Manager” configuration software the device can be configured, e.g. thresholds for alarm output, hysteresis, and more.

Depending on the model, measured values can be transmitted via XBEE radio technology, RS485 Modbus or Ethernet (ETH). In addition, the devices feature a counting function with data retention. This enables operating-hours-counters or time-counters for exceeding and falling below threshold values, as well as single pulse counting (MPP2) or double pulse counting (MPPV2). The device can be mounted on DIN rails as well as on other backgrounds through corresponding holes in the housing.

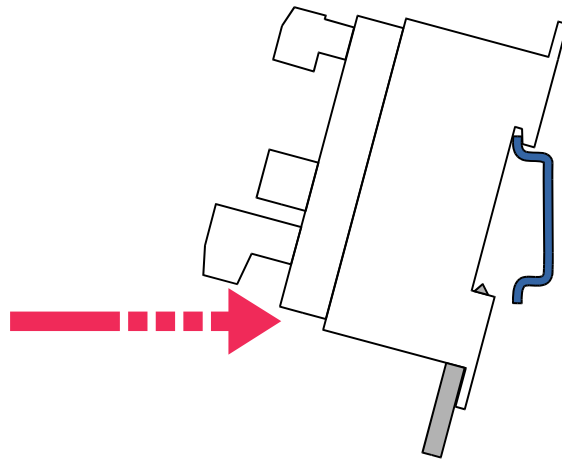
In the “Downloads” area of **www.digalox.com** you can find the latest version of the instruction manual and the software “Digalox® Manager”.

5. Product overview

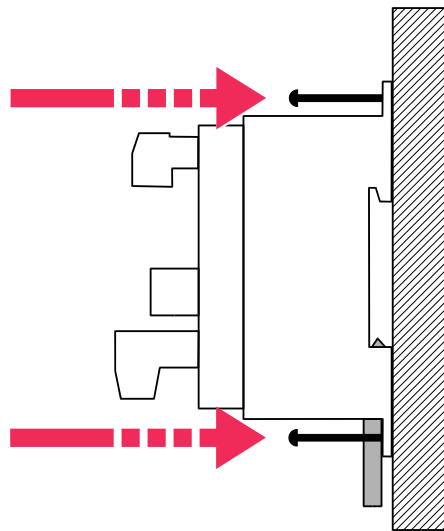


6. Mounting

Hook the device into the top-hat rail from above and then press it at the bottom until the latch engages.



Alternatively, attach the device with 4 screws.

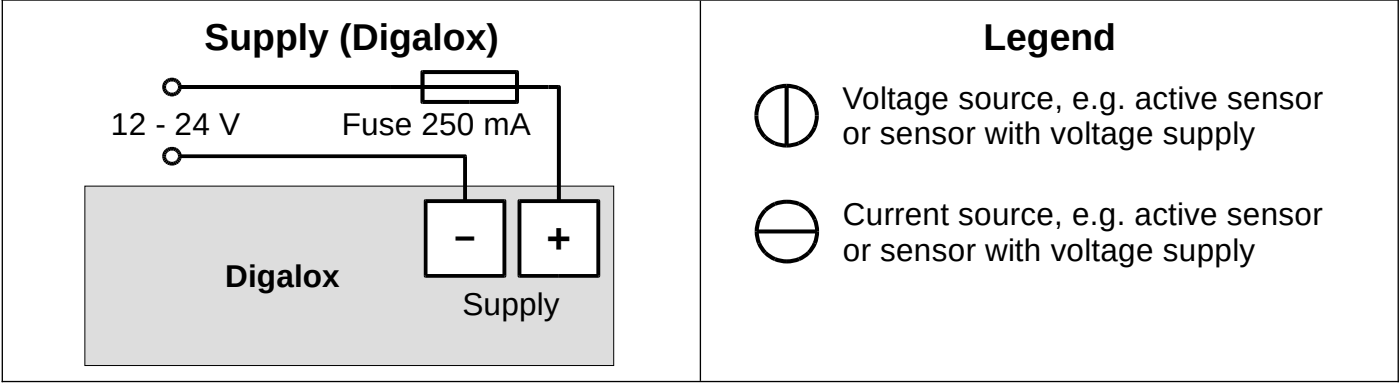


7. Electrical connections

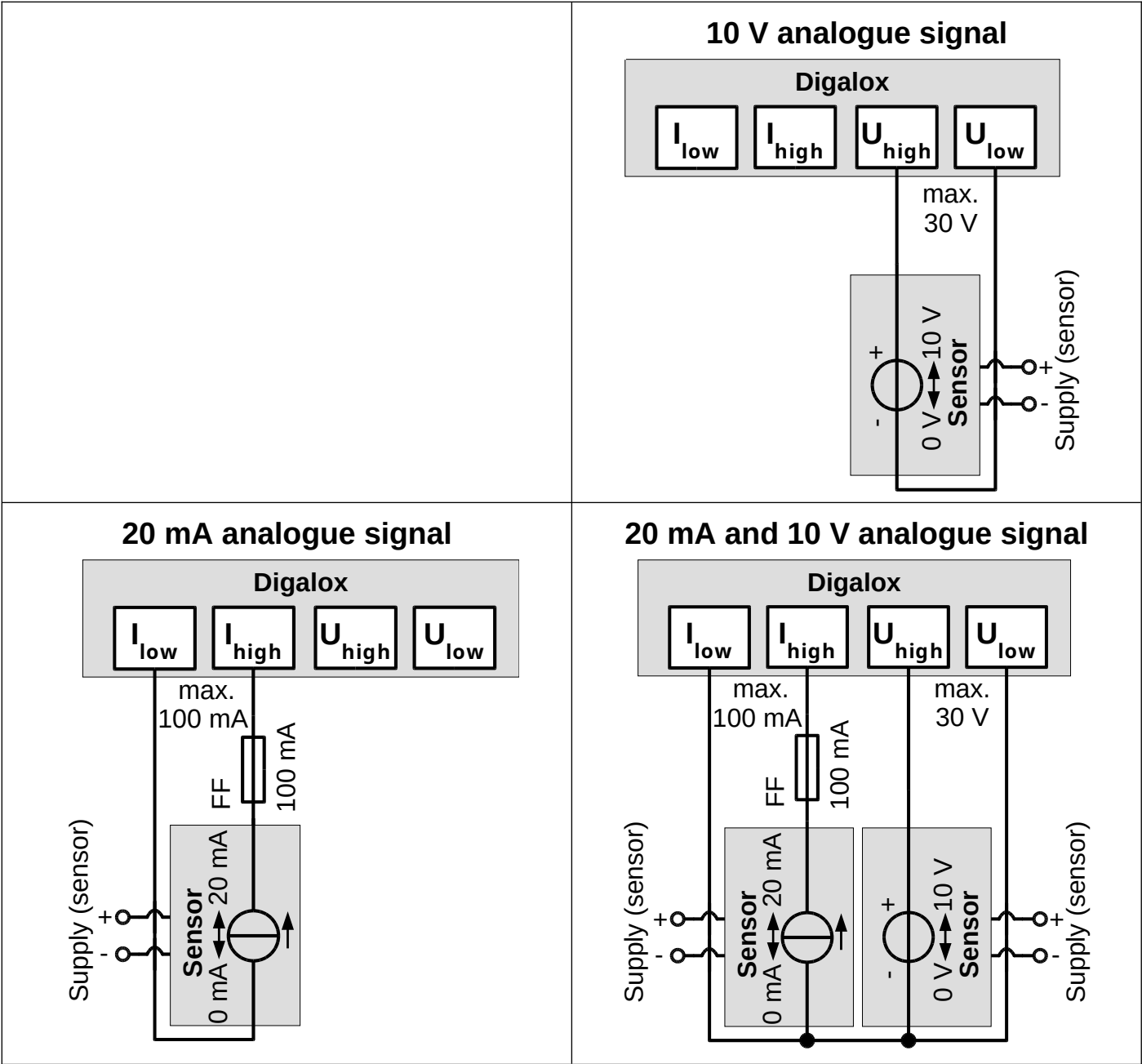


WARNING: The device may only be operated in one of the connection options shown above! Use an ultra-fast-acting fuse (FF) at the current measurement input.

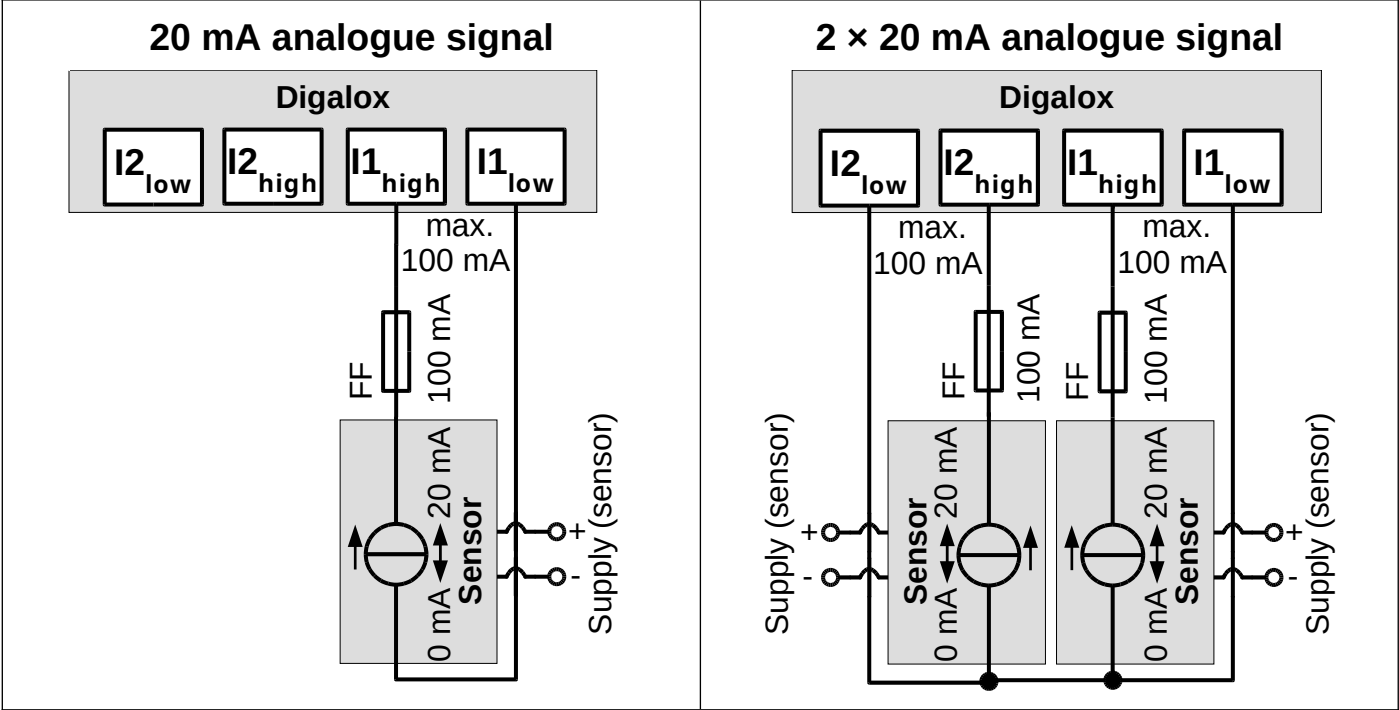
Note: Keep all connecting leads as short as possible, route them in parallel, and twist them together.



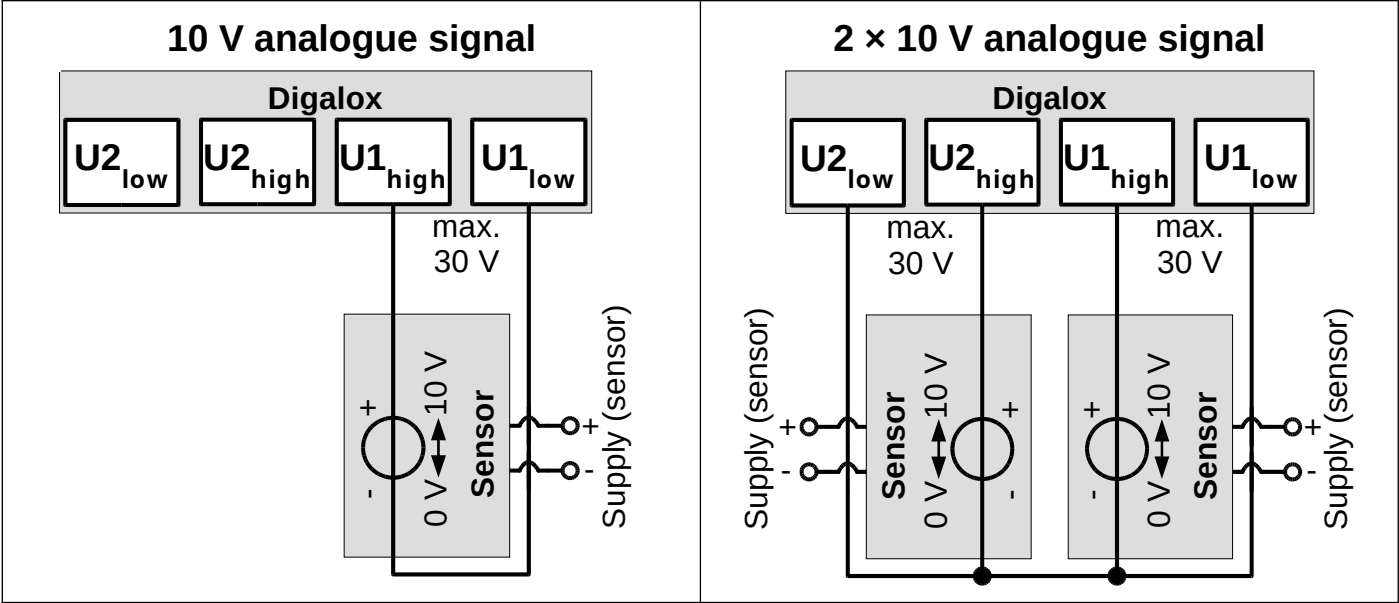
DPM72-MPP2



DPM72-MPPA2

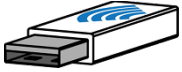


DPM72-MPPV2



8. Configuration

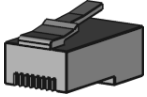
Connect the device to a computer:



XBEE radio technology (2.4 GHz mesh network): See the additional instruction manual “Digalox® DPM72 XBEE interface”

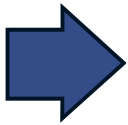


RS485: See the additional instruction manual “Digalox® DPM72 RS485/Modbus interface”



Ethernet: See the additional instruction manual „Digalox® DPM72 ETH interface“

Start the “Digalox® Manager” software and connect it to the device. Settings can then be made on the various tabs and saved in the device.



After restart, the first four display values are provided or the one selected via jumper pins J4-J6 and the three following display values.

Note: AC and DC measurement cannot be done simultaneously. The first display value used defines the type of measurement.

9. Maintenance

Periodically check all external cable connections.

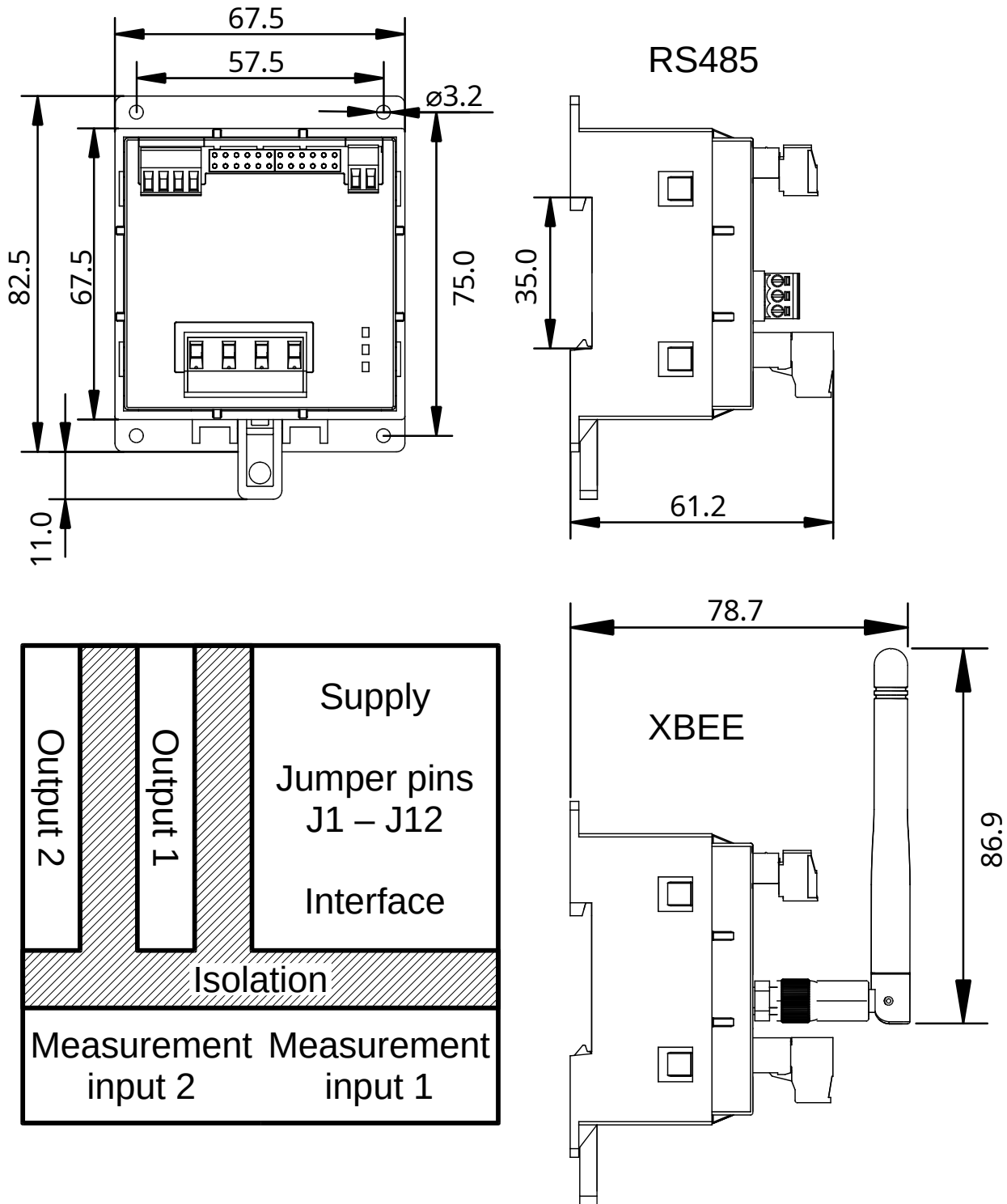
10. Cleaning

Observe the safety instructions before cleaning the device. Clean the device with a dry lint-free soft cloth. Do not use solvents.

11. Specification

	DPM72-MPPA2	DPM72-MPP2	DPM72-MPPV2
Supply	12 - 24 V AC/DC $\pm 10\%$ (50/60 Hz $\pm 10\%$)		
Required external fuse for supply	250 mA, fast (F)		
Power consumption	Max. 1.2 W		
Measurement inputs	Galvanically isolated together (see isolation diagram), isolation strength: 250 V		
Permissible voltage between supply and measuring inputs	< 50 V AC, < 75 V DC		
Measuring range voltage	–	± 30 V DC, 20 V AC, 10 - 500 Hz	
Accuracy voltage	–	$\pm 0.5\%$ true RMS, 24-bit resolution (ADC)	
Input resistance voltage	–	104 k Ω	
Measuring range ampere	20 mA AC/DC (max. 100 mA), 10 - 500 Hz		–
Accuracy ampere	$\pm 0.5\%$ true RMS, 24-bit resolution (ADC)		–
Input resistance ampere	6.2 Ω		–
Required external fuse for ampere	For rated current, ultra fast (FF)		–
Measuring value update	5 Hz (32 kHz sampling rate)		
Recording of measurement	36 seconds to 14 days, 180 internal memory locations		
Alarm outputs	2 optocoupler outputs, max. 30 V DC, 50 mA		
Connections (measurement inputs) - Wire gauge - Wire strip length - Pitch	0.2 - 3.3 mm ² (24 to 12 AWG) 7 - 8 mm 7.62 mm		
Connections (supply, alarm outputs and RS485) - Wire gauge - Wire strip length - Pitch	0.13 - 1.3 mm ² (26 to 16 AWG) 6 - 7 mm 3.5 mm		
Operating temperature	0 °C to +50 °C		
Storage temperature	-20 °C to +70 °C		
Operating altitude	0 to 2000 m above sea level		
IP code	IP00		
Dimensions	67.5 mm × 93.5 mm × 61.2 mm		
Depth	61.2 mm (with plugs, cable outlet at the front) 78.7 mm (with antenna)		
Net weight	106 g		

12. Dimensions [mm] and isolation diagram



13. Contact information

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