

ALMEMO® Measuring Instruments

ALMEMO® 2450



**Compact ALMEMO®
measuring instrument
1 measuring input,
over 35 measuring ranges**

Technical data and functions Serie ALMEMO® 2450

- Generously dimensioned 2-row segment display including units
- Easy and convenient to operate by means of 7 keys.
- Over 35 measuring ranges for
 - Thermocouple and NTC sensors
For the customer's own sensors ready-to-use ALMEMO® connectors are available. (see chapter 07)
 - Atmospheric humidity sensor, capacitive, dewpoint sensor, water detection probe, moisture in wood FHA636MF (see chapter XREF)
 - Pressure transducer FDA602L/D, FD8214, FD8612, Tachometer, turbine flowmeter (see chapter 10)
 - Current clamps FEA604, Voltage / current measuring modules ZA990xAB (see chapter XREF)
- Meteorological radiation probe heads FLA613 (see chapter XREF)
- Carbon dioxide sensor FYAD00CO2, Carbon monoxide probe and ozone probe (see chapter 15),
- ALMEMO® plugs with multi-point adjustment are supported.
- Measuring functions
Measured value, zero-setting, saving of maximum / minimum values, hold function
- Test functions
Segment monitoring, range monitoring, sensor breakage indication, battery voltage check and display.

Technical data, ALMEMO® 2450 series

| | | | |
|--|---|--------------------------------|--|
| Measuring input | 1 ALMEMO® socket | digital | |
| Precision class | C (see page 01.05) | Resolution | (see page 01.06 / 01.07) |
| Measuring rate | 2.5 mops | Linearization accuracy | (see page 01.06 / 01.07) |
| Measuring ranges (see 01.06 / 01.07) | | Standard equipment | |
| NiCr-Ni(K), NiCroSil-NiSil(N), Fe-CuNi(L), Cu-CuNi(U), Cu-CuNi(T), PtRh10-Pt(S), Fe-CuNi(J), NTC | -200 to +950 °C -20 to +100 °C | LCD 7 segments | Measured value 5 characters, 15 mm Function 4½ characters, 9 mm |
| Voltage | -26 to +26 mV, -260 to +260mV, 0 to 2.6V | 16 segments | Units 2 characters, 9 mm 9 symbols |
| Current | 0 to 26 mA, 4 to 20 mA | Keypad | 7 silicone keys |
| Humidity, capacitive | 0 to 100 % RH, (% RH, HcRH, HRH) | Power supply | |
| Dew point, mixture ratio, partial vapor pressure, enthalpy, rotating vanes, digital process (0 / 100 %), frequency, pulse, rotational speed, | Double connectors with 2 x differential al voltage / differential current (input D - B) are not possible. | Battery set | 3 AA alkaline batteries |
| | | Current consumption | approx. 10 mA without input modules |
| | | Housing ABS (max. 70 °C) | 127 x 83 x 42 mm (LxWxH) |
| | | Operating temperature | -10 to +60 °C |
| | | Atmospheric humidity (ambient) | 10 to 90 % RH (non-condensing) |

ALMEMO® 2450 series, accessories

| | | | Order no. |
|------------------------------------|-----------|--------------------|-----------|
| Rubberized impact protection, gray | ZB2490GS2 | Magnetic fastening | ZB2490MH |
| DIN rail mounting | ZB2490HS | Instrument case | ZB2490TK2 |



DIN rail mounting



Rubberized protection



Magnetic fastening

ALMEMO® 2450-1



Compact measuring instrument with interface Runs in battery mode or via mains unit

Technical data and functions

- Technical data and functions, as for ALMEMO® 2450 series
- 2 ALMEMO® output sockets, suitable for all interface cables, network cables, trigger / relay cables
- Complete sensor and device programming via interface
- ALMEMO® DC socket for mains adapter.

Technical data

Technical data, as for ALMEMO® 2450 series

| | |
|--------------------------|--|
| Sensor power supply | 9 V, maximum 0.5 A |
| Option U | 9 V, maximum 70 mA |
| Power supply | 10 to 30 VDC not electr. isolated |
| Mains adapter | ZA1312NA7 230 VAC to 12 VDC, 1 A |
| Outputs | 2 ALMEMO® sockets, suitable for all interface cables |
| with option OA2450I only | Internal RS485 interface, electrically isolated, via DC socket |

Accessories

Order no.

| | |
|--|------------------|
| Mains adapter 12 V, 1 A, with ALMEMO® plug | ZA1312NA7 |
| DC adapter cable | |
| 10 to 30 VDC, 12 V / 0.25 A, electrically isolated | ZA2690UK |

Connecting cables

| | |
|--|------------------|
| USB data cable, electrically isolated | ZA1919DKU |
| Ethernet data cable, electrically isolated | ZA1945DK |
| Analog output cable, -1.25 to +2.0 V, 0.1 mV / digit | ZA1601RK |
| V24 data cable, electrically isolated | ZA1909DK5 |
| Network technology, Bluetooth modules (see chapter „Networking“) | |

Option

Order no.

| | |
|---|----------------|
| Power supply, electrically isolated, 10 to 30 VDC, 80 mA including ALMEMO® plug for DC socket | OA2450U |
| RS485 interface, internal including ALMEMO® DC socket option | OA2450I |
| Analog outputs (socket P0), electrically isolated, integrated internally (see page 01.05) ALMEMO® transmitter | |
| Measuring instrument IP54 (if water-proof plugs are used) | OA2450W |

Standard delivery

Order no.

| | |
|--|----------------|
| Batteries, operating instructions, manufacturer's test certificate | |
| Compact measuring instrument ALMEMO® 2450-1 | MA24501 |
| DAkkS / DKD or works calibration KE90xx, electrical, for measuring instrument (see chapter „Calibration certificates“) | |

ALMEMO® 2450-1L



Compact measuring instrument with interface Runs in battery mode

Technical data and functions

- Technical data and functions, as for ALMEMO® 2450 series

Technical data

Technical data as for ALMEMO® 2450 series

| | |
|---------------------|--------------------|
| Sensor power supply | 9 V, maximum 0.5 A |
|---------------------|--------------------|

Option

Order no.

| | |
|---|----------------|
| Measuring instrument IP54 (if water-proof plugs are used) | OA2450W |
|---|----------------|

Standard delivery

Order no.

| | |
|--|-----------------|
| Batteries, operating instructions, manufacturer's test certificate | |
| Compact measuring instrument ALMEMO® 2450-1L | MA24501L |
| DAkkS / DKD or works calibration KE90xx, electrical, for measuring instrument (see chapter „Calibration certificates“) | |