

# ALMEMO® Measuring Instruments

## ALMEMO® 2490



### ALMEMO® basic measuring instrument

Ideal for all sorts of application,  
quick and easy to operate  
1 or 2 measuring inputs,  
over 65 measuring ranges

### Technical data and functions ALMEMO® 2490 series

- Generously dimensioned 2-row static 7 / 16 segment display including units
- Easy and convenient to operate by means of 7 keys
- Over 65 standard measuring ranges
- Memory sufficient for 100 measured values, can be called up and viewed in the display
- Good measuring accuracy, measuring rate up to 10 measuring operations per second (mops)
- Support for ALMEMO® plugs with multi-point adjustment, special linearization, and special measuring ranges
- Measuring functions  
Measured value, zero-setting, sensor adjustment, saving of maximum / minimum values, memory for 100 values, cold junction compensation, and temperature compensation
- Test functions  
Segment monitoring, range monitoring, sensor breakage indication, battery voltage check and display

### Technical data ALMEMO® 2490 series

Precision class	B (see page 01.05)	Standard equipment	
Measuring rate	2.5 / 10 measuring operations per second	LCD 7 segments	Measured value 5 characters, 15 mm
Measuring ranges as on page XREF - but		16 segments	Function 4½ characters, 9 mm
Milliamperes DC	-26 to +26 mA	Keypad	Units 2 characters, 9 mm
Battery set	3 AA alkaline batteries	Housing	9 symbols
Current consumption	approx. 20 mA without input modules		7 silicone keys
			ABS (maximum 70 °C)
			127 x 83 x 42 mm (LxWxH)

### ALMEMO® 2490 series, accessories

#### Order no.

DIN rail mounting	ZB2490HS	Magnetic fastening	ZB2490MH
Rubberized impact protection, green	ZB2490GS1	Instrument case	ZB2490TK2



DIN rail mounting



Rubberized protection



Magnetic fastening

## ALMEMO® 2490-1 / -2



ALMEMO® 2490-1



ALMEMO® 2490-2

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

### Technical data and functions

- Technical data and functions, as for ALMEMO® 2490 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® 2490 series

Measuring input	
2490-1	1 ALMEMO® input socket
2490-2	2 ALMEMO® input sockets, el. isol., with semicond. relays (50V)
Additional channels	4 function channels, device-internal
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 OA2490I only	RS485 interfac

### Accessories

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

Option	Order no.
Power supply, electrically isolated, 10 to 30 VDC, 80 mA including ALMEMO® plug for DC socket	OA2490U
RS485 interface, internal, including option U	OA2490I
Analog outputs, electrically isolated, integrated internally (see page 01.50) ALMEMO® transmitter	
Measuring instrument IP54 (if water-proof plugs are used)	OA2490W

### Standard delivery

Standard delivery	Order no.
Batteries, operating instructions, manufacturer's test certificate	
Basic measuring instrument ALMEMO® 2490-1	MA24901
Basic measuring instrument ALMEMO® 2490-2	MA24902

## ALMEMO® 2490-1L / -2L



ALMEMO® 2490-1L



ALMEMO® 2490-2L

**Basic measuring instrument**  
**Runs in battery mode**

### Technical data and functions

- Technical data and functions, as for ALMEMO® 2490 series

### Technical data

Technical data, as for ALMEMO® 2490 series

Measuring inputs	
2490-1L	1 ALMEMO® input socket
2490-2L	2 ALMEMO® input sockets, el. isol., with semicond. relays (50 V)
Sensor power supply	9 V, maximum 0.5 A
Outputs	None

### Option

Option	Order no.
Measuring instrument IP54 (if water-proof plugs are used)	OA2490W

### Standard delivery

Standard delivery	Order no.
Batteries, operating instructions, manufacturer's test certificate	
Basic measuring instrument ALMEMO® 2490-1L	MA24901L
Basic measuring instrument ALMEMO® 2490-2L	MA24902L

DAkkS or works calibration KE90xx, electrical, for measuring instrument (see chapter „Calibration certificates“).  
 DAkkS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.