

Universal ALMEMO® transmitter 2490 with analog output



- 1 or 2 measuring inputs.
- Built-in analog output
2 x 10 V or 20 mA
(programmable)
- Display and keypad.

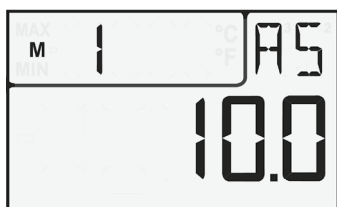
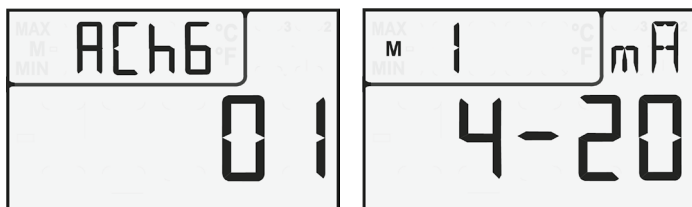
Technical features

- Analog transmitter with built-in double analog output.
- Analog output range and measuring channel assignment programmable via keyboard.
- Basic measuring instrument with over 65 standard measuring ranges.
- Good measuring accuracy, measuring rate up to 10 measurements/s.
- Support of ALMEMO® connectors with multipoint adjustment, special linearization and special ranges.
- Measuring functions: Measured value, zeroing, sensor calibration, max. and min. value storage.
- Full sensor and instrument programming via interface

Technical data

Precision class	B, see page 16		
Measuring rate	10 and 2.5 mops	0.0 to 10.0 V	16 bit DAC, electrically isolated.
Measuring ranges	over 65 measuring ranges, inter alia thermocouples, Pt100, Pt1000, NTC temperature / humidity, (capacitive or psychrometric)	0.0 / 4.0 to 20.0 mA	0,5 mV/digit, load > 100 kOhm. 1 µA/digit, load < 500 Ohm. Accuracy: 0.1 % of meas. v. +0.1 % of final v Temperature drift: 10 ppm/K. Time constant: 100 µs.
Measuring inputs	via ALMEMO® connector		
2490-1R02U	1 ALMEMO® socket	Digital outputs	via ALMEMO® sockets A1 and A2 for PC cable USB or RS232 and relay cable
2490-2R02U	2 ALMEMO® sockets, electrically isolated with semiconductor relay (50 V).	Power supply	via ALMEMO® socket DC 10 ... 30 V DC, electrically isolated to analog outputs and measuring input
Additional channels	4 function channels internal to the device	Standard equipment	LCD screen, keypad
Sensor supply	9 V, max. 80 mA for power supply operation	Housing	ABS, L127 x W83 x H42 mm
Analog outputs	via ALMEMO® socket P0: 2 x 10 V or 20 mA (programmable), both outputs with common ground.	Environmental conditions and general technical data	see page 16 onwards

Programming the analog output (Example)



Analog start

Analog end

ALMEMO® 2490-1R02U



**Analog transmitter, 1 measuring input
Double analog output**

ALMEMO® 2490-2R02U



**Analog transmitter, 2 Measuring inputs
Double analog output**

Accessories

Order no.

Power supply: (via ALMEMO® socket DC)

100 to 240 V AC via mains unit 12 V, 1.5 A, with ALMEMO® connector

ZA1312NA12

10 to 30 VDC, maximum 80 mA, electrically isolated, via ALMEMO® clamp connector ZA1000FSV

included in delivery

Digital interface: (via ALMEMO® socket A1)

USB interface via ALMEMO® USB cable

ZA1919DKU

RS232 interface via ALMEMO® RS232 cable

ZA1909DK5

Limit value contact: (via ALMEMO® socket A2)

(see chapter „Output modules“)

(Programming via digital interface, see above)

2 normally open contacts, 50 VDC / 500 mA (can also be programmed as inverted)

via ALMEMO® relay cable, V6, clamped connection

ZA1006EKG

ALMEMO® limit value cable with banana plugs (for electrical socket adapter)

ZA1006GK

Electrical safety socket adapter, 250 V / 6 A (for ALMEMO® limit value cable)

ZB2280RA

Installation:

DIN rail

ZB2490HS

Magnet

ZB2490MH

Standard delivery

Order no.

Analogue transmitter, measuring input via ALMEMO® plug.

Double analogue output incl. ZA1000KS clamping plug.

Electrically isolated power supply incl. ZA1000FSV terminal plug.

Operating instructions, manufacturer's test certificate.

Analog transmitter ALMEMO® 2490-1R02U, 1 measuring input

MA24901R02U

Analog transmitter ALMEMO® 2490-2R02U, 2 measuring inputs

MA24902R02U

DAkkS or factory calibration KE90xx, electrical, for measuring instruments, see chapter „Calibration certificates“.

The DAkkS calibration meets the requirements of DIN EN ISO/IEC 17025 for test equipment.