

ALMEMO® 1033-2



Reference measuring instrument for temperature.
 High-precision measuring with Pt100 sensors
 Resolution 0.001 K
new: Measuring range up to 720 °C
 with highest resolution 1 mK

Technical data and functions

- **new:** Extended measuring range up to 720 °C with highest resolution 1 mK.
- **new:** Function expansion as standard. The 4 sensor-specific parameters R0 and A, B, C of the CvD equation (Callendar-van-Dusen equation) for any Pt100 sensor can be programmed by the user.
- Temperature measurement with very high resolution, precision, and linearity, using Pt100 sensors
- Suitable as reference device in calibration laboratories and quality assurance procedures
- Very high accuracy thanks to multi-point adjustment of the Pt100 temperature sensor
- 2 electrically isolated measuring inputs for Pt100 sensors
- Resolution : 0.001 K, Units : °C, °F, K
- High-resolution A/D converter, delta-sigma, 24-bit, 1.25 mops (measuring operations per second)
- Two output sockets for digital interface, ALMEMO® memory connector
- Compact, modern, ergonomic design
- Graphics display, illuminated with white light
- Easy and convenient to operate by means of 4 soft-keys and cursor block
- Measured value display 2 measured values and differential
- Measuring functions: Zero-setting, smoothing, maximum / minimum values, individual value memory for 100 values
- Data logger with ALMEMO® memory connector (accessory)
- Sensor programming: Smoothing, designation, units, resolution, multi-point adjustment
- Device configuration: Illumination, contrast, device address, baud rate
- Choice of language: German, English, French

Technical data ALMEMO® 1033-2

Measuring inputs	2 ALMEMO® input sockets for Pt100 sensors	Standard equipment	
Electrical isolation	Semiconductor relay (50 V)	Display	Graphics display, 128 x 64 pixels, 8 rows
A/D converter	Delta-sigma, 24-bit, 2.5 mops	Illumination	2 white LEDs
Measuring range		Keypad	7 silicone keys (of which 4 soft-keys)
P314 : Pt100, -200 to +720 °C resolution 0.001 K		Date and time-of-day	Real-time clock, buffered by device battery
P214 : Pt100, -200 to +850 °C resolution 0.01 K		Individual value memory, internal	100 measured values
Measuring current	1 mA	Power supply	
Accuracy		Battery set	3 AA alkaline batteries
P314 : ±0.010 K ±1 digit in range -100 to +720 °C		Mains adapter	ZA1312NA10 100 to 230 VAC to 12 VDC, 2 A, electrically isolated
P214 : ±0.03 K ±1 digit in range -100 to +850 °C		Current consumption (without input and output modules)	approx. 20 mA
Nominal conditions	23 °C ±2 K, < 90 % r.H., battery mode	With illumination	approx. 40 mA
Temperature drift	typical 2 ppm / K	Housing	127 x 83 x 42 mm (LxWxH) ABS, 290 g
Outputs	2 ALMEMO® sockets for interface cable and ALMEMO® memory connector		

Accessories	Order no.
Software WinControl for data acquisition for 1 device up to 20 channels	SW5600WC1
USB data cable, electrically isolated	ZA1919DKU
Ethernet data cable	ZA1945DK
ALMEMO® memory connector with micro SD	ZA1904SD
Mains adapter 12V, 2A with ALMEMO® connector	ZA1312NA10
Rubberized impact protection, gray	ZB2490GS2
DIN rail mounting	ZB2490HS
Instrument case	ZB2490TK2

Input connectors

Order no.

ALMEMO® input connector up to 720 °C, resolution 0.001 K (range P314)	ZA9030FS7P3
ALMEMO® input connector up to 850 °C, resolution 0,01 K (range P214)	ZA9030FS2P3

Lieferumfang

Order no.

Reference measuring instrument for temperature up to 720 °C.
 Batteries, operating instructions, manufacturer's test certificate, .

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