

## ALMEMO® 2590A



**ALMEMO® professional measuring instrument with data logger function,  
Comprehensive range of functions for all application areas,  
Graphics display for showing measured values and programming,  
2 or 4 measuring inputs**

### Technical data and functions, ALMEMO® 2590A series

- New variant, further developed
- Good measuring accuracy, measuring rate up to 10 measuring operations per second (mops)
- Over 65 standard measuring ranges
- Support for ALMEMO® plugs with multi-point adjustment, special linearization, and special measuring ranges
- Graphics display with white illumination, easy and convenient operation by means of 4 soft-keys and cursor block
- Clear and easy-to-understand menu system
- 3 measuring menus (1 menu can be freely configured by user from a range of 50 functions), measured values displayed numerically, 1 to 12 measured values can be displayed in two sizes or graphically in bar chart form.
- Intelligent sensor readings with sensor-specific functions  
Cold junction compensation, temperature compensation, and atmospheric pressure compensation
- Measuring functions  
Measured value, zero-setting, setpoint adjustment
- Function menus  
Maximum value, minimum value, memory sufficient for 99 measured values, average value over time / individual values / measuring points, smoothing, volume flow with center point measuring, two-point adjustment, scaling, data logger with configuration menus
- Option VN  
Volume flow determined from matrix measuring as per DIN EN 12599
- Programming menus for clear and easy-to-understand sensor programming, range, units, designation, right through to special functions, configuration of device parameters and of output modules
- Choice of languages : German, English, French (other options also available)
- 2 ALMEMO® output sockets, suitable for digital interfaces, analog output, trigger input, alarm contacts, memory card
- External memory connector with micro SD can simply be plugged in.
- Sleep mode for long-term recording

### Technical data ALMEMO® 2590A series

Precision class	A (see page 01.05)	Power supply	
Measuring rate	2.5 / 10 measuring operations per second	Battery set	3 AA alkaline batteries
Additional channels	4 function channels, device-internal	Mains adapter	ZA1312NA7 230 VAC to 12 VDC, 1 A electrically isolated
Sensor power supply	6 / 9 / 12 V, maximum 0.5 A	DC adapter cable, electrically isolated	ZA2690-UK 10 to 30 V, 0.25 A
Outputs	2 ALMEMO® sockets, suitable for all output modules (analog / data / trigger / relay cables, memory, etc.)	Current consumption (without input and output modules)	
Standard equipment		Active mode	approx. 12mA
Display	Graphics display, 128 x 64 pixels, 8 rows Illumination 2 white LEDs	With illumination	approx. 32 mA
Keypad	7 silicone keys (of which 4 soft-keys)	Sleep mode	approx. 0.05 mA
Date and time-of-day	Real-time clock, buffered by battery	Housing	127 x 83 x 42 mm (LxWxH) ABS (maximum 70 °C) 290 g

# ALMEMO® Measuring Instruments

## Serie ALMEMO® 2590A

### Accessories

	Order no.
Memory connector with micro SD (see page 06.02)	ZA1904SD
Mains adapter 12 V / 1 A	ZA1312NA7
DC adapter cable, 10 to 30 VDC, 12 V / 0.25 A, electrically isolated	ZA2690UK
Rubberized impact protection, green	ZB2490GS1
Magnetic fastening	ZB2490MH
DIN rail mounting	ZB2490HS
Instrument case	ZB2490TK2
Network technology, Bluetooth modules (see chapter „Networking“)	

### Connecting cables

	Order no.
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“)	



## ALMEMO® 2590-2A



**Professional measuring instrument, 2 measuring inputs, Data logger with external memory connector (accessory)**

### Technical data and functions

- Technical data and functions as for ALMEMO® 2590A series

### Technical data

Technical data as for ALMEMO® 2590A series

Measuring inputs	2 ALMEMO® input sockets, el. isol., with semicond. relays (50V)
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### Option

Volume flow determined from matrix measuring as per DIN EN 12599  
 Temperature ranges for 8 refrigerants  
 Measuring instrument IP54 (if water-proof plugs are used)

### Order no.

Volume flow determined from matrix measuring as per DIN EN 12599 **OA2590VN**  
 Temperature ranges for 8 refrigerants **SB0000R2**  
 Measuring instrument IP54 (if water-proof plugs are used) **OA2590W**

### Standard delivery

Measuring instrument, batteries, operating instructions, manufacturer's test certificate

**Professional measuring instrument ALMEMO® 2590-2A**

### Order no.

**MA25902A**

## ALMEMO® 2590-4AS



**Professional measuring instrument, 4 measuring inputs, Data logger with internal memory or external memory connector**

### Technical data and functions

- Technical data and functions, as for ALMEMO® 2590A series
- Internal EEPROM sufficient for 100 000 measured values, configurable as linear or ring memory

### Technical data

Technical data as for Serie ALMEMO® 2590A series

Measuring inputs	4 ALMEMO® input sockets, el. isol., with semicond. relays (50V)
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Memory, internal EEPROM	sufficient for 100,000 measured values
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### Option

Volume flow determined from matrix measuring as per DIN EN 12599  
 Temperature ranges for 8 refrigerants  
 Measuring instrument IP54 (if water-proof plugs are used))

### Order no.

Volume flow determined from matrix measuring as per DIN EN 12599 **OA2590VN**  
 Temperature ranges for 8 refrigerants **SB0000R2**  
 Measuring instrument IP54 (if water-proof plugs are used)) **OA2590W**

### Standard delivery

Measuring instrument, batteries, operating instructions, manufacturer's test certificate.

**Professional measuring instrument ALMEMO® 2590-4AS**

### Order no.

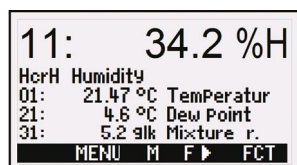
**MA25904AS**

Measuring instrument, batteries, rubberized impact protection ZB2490GS1, Mains unit ZA1312NA7, USB data cable ZA1919DKU, Case ZB2490TK2, Operating instructions, manufacturer's test certificate

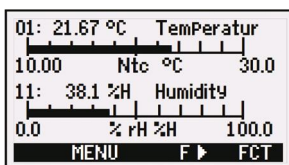
**Professional measuring instrument ALMEMO® 2590-4AS Case set MA25904ASKSU**

DAkKS or works calibration KE90xx, electrical, for measuring instrument (see chapter „Calibration certificates“).

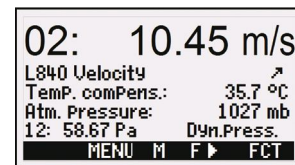
DAkKS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.



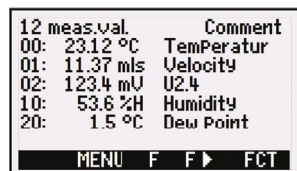
Humidity reading with further humidity variables, e.g. temperature, dew point, mixture ratio



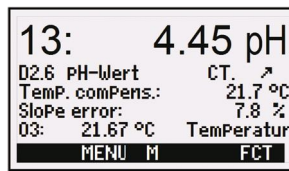
Temperature / humidity display in bar chart form



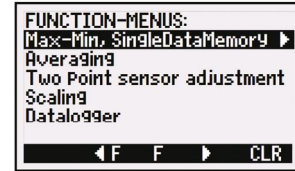
Flow reading, measured value with automatic temperature compensation and atmospheric pressure compensation



Overview of all sensors connected



pH reading, measured value with automatic temperature compensation



Function menus