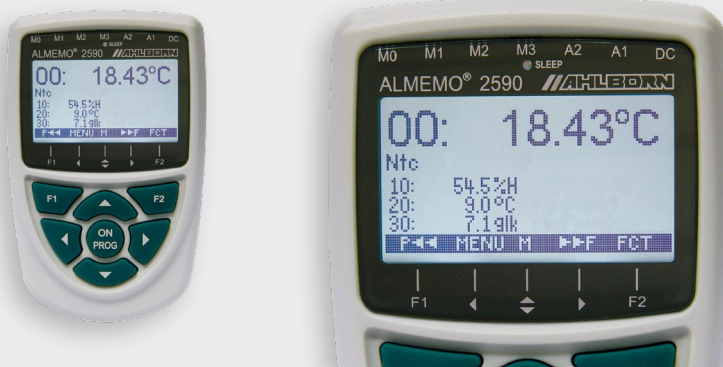


## ALMEMO® 2590A



**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

- 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 old 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
- 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 01.04)	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	ZA1312NA10 100 to 240 VAC to 12 VDC, 2 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, 290 g

## Serie ALMEMO® 2590A

### Accessories

Memory connector with micro SD (see page 06.02)  
 Mains adapter 12 V / 2 A  
 DC adapter cable, 10 to 30 VDC, 12 V / 0.25 A, electrically isolated  
 Rubberized impact protection, green  
 Magnetic fastening  
 DIN rail mounting  
 Instrument case  
 Network technology, Bluetooth modules (see chapter „Networking“)

### Order no.

ZA1904SD  
 ZA1312NA10  
 ZA2690UK  
 ZB2490GS1  
 ZB2490MH  
 ZB2490HS  
 ZB2490TK2

### Connecting cables

USB data cable, electrically isolated  
 Ethernet data cable, electrically isolated  
 Analog output cable, electrically isolated , 1 x 20mA  
 Analog output cable, electrically isolated , 2 x 10V  
 V24 data cable, electrically isolated.  
 Network technology, Bluetooth modules (see chapter „Networking“)

### Order no.

ZA1919DKU  
 ZA1945DK  
 ZA1601RI  
 ZA1602RU  
 ZA1909DK5



# ALMEMO® Measuring Instruments

## 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)

### Option

### Order no.

Volume flow determined from matrix measuring  
as per DIN EN 12599  
Temperature ranges for 8 refrigerants

**OA2590VN  
SB0000R2**

### Standard delivery

### Order no.

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

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

**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)

Memory, internal EEPROM sufficient for 100,000 measured values

### Option

### Order no.

Volume flow determined from matrix measuring  
as per DIN EN 12599  
Temperature ranges for 8 refrigerants

**OA2590VN  
SB0000R2**

### Standard delivery

### Order no.

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

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

**MA25904AS**

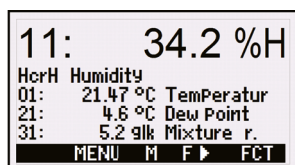
Measuring instrument, batteries, rubberized impact protection ZB2490GS1, Mains unit ZA1312NA10, USB data cable ZA1919DKU, Case ZB2490TK2, Operating instructions, manufacturer's test certificate

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

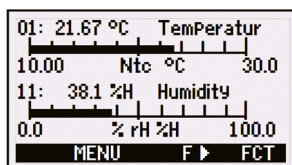
**MA25904ASKSU**

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

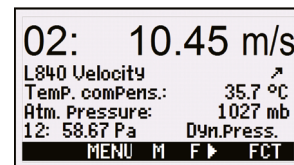
DAkKS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.



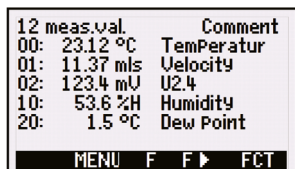
Humidity reading with further humidity variables, e.g. temperature, dew point, mixture ratio



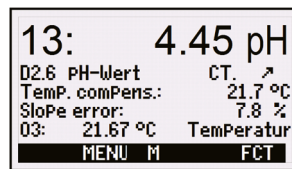
Temperature / humidity display in bar chart form



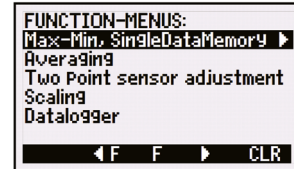
Flow reading, measured value with automatic temperature compensation and atmospheric pressure compensation



Overview of all sensors connected



pH reading, measured value with automatic temperature compensation



Function menus