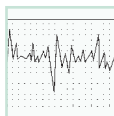
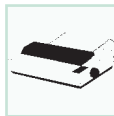


# ALMEMO® MEASURING INSTRUMENTS

**new!**

**Handheld data logger  
ALMEMO® 2690-8  
with 5 measuring inputs, 2 outputs,  
RS232, Ethernet, analog**



## Technical data

|                     |  |
|---------------------|--|
| Measuring inputs:   | 5 ALMEMO® input sockets, electr. isol., with semiconductor relay (50 V)  |
| Channels            | 5 primary chann., maximum 19 additional chann. for double sensors and function chann. (e.g. differential values) |
| A/D converter       | Delta-sigma 24-bit, 50 meas. op. p. s. see Technical data, page 01.05  |
| Sensor power supply | Battery 6 / 9 / 12 V, maximum 100 mA<br>Mains adapter 12 V, maximum 100 mA                                       |
| Outputs             | 2 ALMEMO® sockets for all output modules (analog, data, trigger, relay cables, memory etc.)                      |

## Standard equipment

|                      |   |
|----------------------|---|
| Display              | Graphics, 128x128 pixels, 16 rows<br>Lighting, 5 white LEDs, 3 levels |
| Keypad               | 9 tactile silicone keys (4 soft-keys)                                 |
| Memory               | 512-KB EEPROM (100,000 meas. values)                                  |
| Date and time-of-day | Real-time clock, buffered with battery                                |

## Power supply

|               |   |
|---------------|---|
| Battery       | 3 AA alkaline batt. or rechargeable batt.   |
| Mains adapter | ZA2690NA1, 230 V AC to 12 V DC, 600 mA, electrically isolated<br>DC adapter cable, electrically isolated<br>ZA2690-UK, 10 to 30 V, 0.25 A |

Current consumption without input and output modules

|               |                      |
|---------------|----------------------|
| Active mode   | approx. 30 mA        |
| with lighting | approx. 50 to 150 mA |
| SLEEP mode    | approx. 0.05 mA      |

|         |   |
|---------|---|
| Housing | (LxWxH) 209 x 107 x 54 mm<br>ABS (maximum 70 °C), 570 g |
|---------|---|

|            |   |
|------------|---|
| Protection | IP54 (from 2nd quarter 2005) if water-proof connectors / sensors are used<br>Included as standard |
|------------|---|

Other general data see Technical Data, page 01.05

## Technical features

- ▶ Modern housing with rubberized impact protection and positioning clip; also moisture-proof thanks to new, injection-molded connectors and sealing lips
- ▶ 5 ALMEMO® input sockets, electrically isolated, for 5 ALMEMO® sensors, 20 sensor chann., 4 additional internal function chann.
- ▶ 2 ALMEMO® output sockets for digital interfaces, analog output, trigger input, alarm contacts, memory card
- ▶ High-speed, high-resolution A/D converter, 24-bit, 50 meas. op. per sec. New measuring ranges Pt100, 0.000 to 65.000 °C
- ▶ Ideal display with large, brightly illuminated graphics
- ▶ Easy and convenient operation by means of 4 soft-keys and cursor block, Comprehensive menu system with wizards and help windows
- ▶ 9 measuring menus (3 can be freely configured by user from range of 50 functions)
- ▶ Measured values can be displayed graphically in line diagram or bar chart form and from 1 to 20 measured values can be displayed numerically in various sizes.
- ▶ Measuring functions : Measured value, zero-setting, setpoint adjustment, maximum and minimum values stored with date and time-of-day, smoothing, average values over time or measuring points, limit value monitoring, cold junction compensation, temperature compensation, and atmospheric pressure compensation
- ▶ 8 programming menus for easy-to-understand parametrization of cycles, times, memory, output modules, and power supply  
Sensor programming with range, units, comments, scaling, error correction, etc.
- ▶ New Option KL : Multi-point calibration, calibration data management, user-defined linearization, special ranges in the ALMEMO® connector, e.g. 0.000 to 50.000 ohms, NTC -5.000 to 46.000 °C, YSI 400
- ▶ 10 wizards for quickly and easily mastering otherwise complex configurations : Sensor scaling, two-point adjustment, calculation functions, and reference channels; Sensor programming for determining thermal coefficients and wet-bulb globe temperature (WBGT), alarm relay assignment, scaling, and analog output assignment
- ▶ Choice of languages : German, English, French
- ▶ EEPROM with capacity for 100,000 measured values, internally configurable as linear or ring memory
- ▶ Memory connector with MMC card and standard file format
- ▶ SLEEP mode for long-term recording
- ▶ New Device software update via interface

## Extent of the delivery

|   |                             |
|---|-----------------------------|
| Data logger ALMEMO® 2690-8, Operating instructions, ALMEMO® Manual, including manufacturer's test certificate, AMR-Control software | Order no.<br><b>MA26908</b> |
| Data logger set ALMEMO® 2690-8 in case, as above including mains adapter and data cable in case                                     | <b>MA26908KS</b>            |
| Option KL Multi-point calibration, special ranges   | OA2690KL                    |
| Option R Temperature ranges for 8 coolants  | SB0000R                     |

## Accessories

|   |           |
|---|-----------|
| Mains adapter 12 V / 600 mA   | ZA2690NA1 |
| Rechargeable battery set with 3 NiMH AA cells 1600 mAh, coded, and adapter for high-speed charging, maximum 2 A | ZA2690AS  |
| DC adapter cable, 10 to 30 V DC, 12 V / 0.25 A, electr. isol.   | ZA2690UK  |
| Memory connector with MMC card (QI 05)  | ZA1904MMC |
| Analog output cable, -1.25 to 2.0 V, 0.1 mV / digit   | ZA1601RK  |
| Trigger and alarm cable (2 relays, 1 ohm, 300 mA, 50 V)   | ZA1000EGK |
| V24 data cable, electr. isol., max. 115.2 KB  | ZA1909DK5 |
| Ethernet data cable, electr. isol., max. 115.2 KB   | ZA1945DK  |
| Network cable, electr. isol., max. 115.2 KB   | ZA1999NK5 |
| Transport case, large (aluminum), see Chapter 07  | ZB2590TK2 |
| Network technology, Bluetooth modules, see Chapter 05   |           |

01/2005 We reserve the right to make technical changes.