

ALMEMO® MEASURING INSTRUMENTS

new!

ALMEMO® 5690-1M
Data acquisition system with
and 9 to 99 measuring inputs,
2 outputs for RS232, Ethernet, analog,
Memory with drive for multimedia card
or internal 512-KB EEPROM (option S)

Our data acquisition systems are modular and can be individually configured for your specific measuring task. We look forward to providing you with competent, personal advice. Please feel free to ask for a demonstration and let our specialists introduce you to the large number of options regarding the application and configuration.



Technical Features:

- ▶ Data logger with external memory connector and multimedia card, recording in standard FAT16 file format, transmission to PC via USB card reader.
- ▶ Option EEPROM with capacity for 100,000 measures values, internally configurable as linear or ring memory.
- ▶ Sleep mode for long-term recording.
- ▶ 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 over measuring points, limit value monitoring, cold junction compensation, temperature compensation, and atmospheric pressure compensation.
- ▶ Sensor programming on the ALMEMO® connector itself.
- ▶ 9 ALMEMO® input sockets, electrically isolated, for 9 ALMEMO® sensors, 31 additional channels (maximum), (of which 4 internal function channels).
- ▶ Extendible up to 99 inputs with various selector switch boards and maximum 100 meas. channels.
- ▶ High-speed, high-resolution A/D converter, 24-bit, 2.5 to 100 measuring operations per second.
- ▶ **New:** Electr. isol. between measuring inputs and supply.
- ▶ 2 ALMEMO® output sockets for digital interfaces, analog outputs, trigger input, and alarm contacts.
- ▶ 5 LEDs for indicating various operating states in the measuring circuit.
- ▶ **New:** Cold junction measuring with 2 NTCs / insert and interpolation Ranges Pt100, 0.000 to 65.000 °C, timer 6500.0 seconds.
- ▶ **New:** Special ranges in the ALMEMO® connector, provided as standard, e.g. 0.000 to 50.000 ohms, NTC, -5.000 to 46.000 °C, YSI 400 etc.
- ▶ **New:** Option KL User-defined linearization, multi-point calibration, and calibration data management for measuring inputs M0 to M8 (see pages 01.17 and 03.03).
- ▶ Accessories Rechargeable battery system, 8 AA-type NiMH batteries.
- ▶ **New:** Device software update via interface AMR-Control programming software (included in delivery).
- ▶ Devices are EMC tested as per industrial standard.

Types and ordering information

9 Inputs, max. 40 Channels, 2 Outputs, cascaded Interface, real time clock, 1 key, Mains adapter 12V/2A
 19" desk-top housing 12 DU, shielded, Dimensions: 77 x 145 x 218 mm (WxHxD), 1 slot
 19" desk-top housing 32 DU, shielded, Dimensions: 179 x 158 x 232 mm (WxHxD), 6 slots
 19" desk-top housing 84 DU, shielded, Dimensions: 444 x 158 x 232 mm (WxHxD), 19 slots
 19" sub-rack 84 DU, Dimensions: 483 x 132 x 273 mm (WxHxD), 19 slots

Options

- S: Internal EEPROM with capacity for 100,000 measures values
- KL: Linearization, multi-point calibration, and calibration data management (see 01.17 / 03.03)
- R: Temperature ranges for 8 coolants (see page 11.08)

Accessories

ALMEMO® memory connector for multimedia card

Order No. MA56901M09TG1
Order No. MA56901M09TG3
Order No. MA56901M09TG8
Order No. MA56901M09BT8

Order No. OA5690S
Order No. OA5690KL
Order No. SB0000R

Order No. ZA1904MMC

ALMEMO® MEASURING INSTRUMENTS

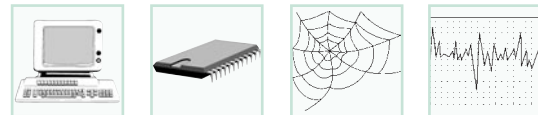
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ALMEMO® 5690-2M

Data acquisition system with graphics display
and 9 to 99 measuring inputs,
2 outputs for RS232, Ethernet, analog,
Memory with drive for multimedia card
or internal 512-KB EEPROM (option S)

new!

01/2007 We reserve the right to make technical changes.



Technical Features:

- ▶ 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.
- ▶ Choice of languages : German, English, French (others also available).
- ▶ 9 measuring menus (3 can be freely configured by user from a range of 50 functions).
- ▶ Measured values can be displayed graphically in line chart or bar chart form and from 1 to 20 measured values can be displayed numerically in various sizes.
- ▶ 8 programming menus for easy-to-understand parametrization of cycles, times, memory, device locking, output modules, and power supply, Sensor programming with range, units, comments, scaling, error correction, etc.
- ▶ 9 LEDs for indicating various operating states.
- ▶ Data logger with multimedia card, provided as standard, recording in standard FAT16 file format, transmission to PC via USB card reader.
- ▶ Further technical characteristics like ALMEMO® 5690-1M.

Types and ordering information

Graphic display with 3 brightness levels, Multi-Media-Card-Memory and USB card reader, 9 Inputs, max. 40 Channels,
2 Outputs, cascaded Interface, real time clock, 9 keys, Mains adapter 12V/2A
19" desk-top housing 32 DU, shielded, Dimensions: 179 x 158 x 232 mm (WxHxD), 6 slots
19" desk-top housing 84 DU, shielded, Dimensions: 444 x 158 x 232 mm (WxHxD), 19 slots
19" sub-rack 84 DU, Dimensions: 483 x 132 x 273 mm (WxHxD), 19 slots

Options

- S: Internal EEPROM with capacity for 100,000 measures values
- KL: Linearization, multi-point calibration, and calibration data management (see 01.17/03.03)
- R: Temperature ranges for 8 coolants (see page 11.08)

Order No. MA56902M09TG3
Order No. MA56902M09TG8
Order No. MA56902M09BT8

Order No. OA5690S
Order No. OA5690KL
Order No. SB0000R

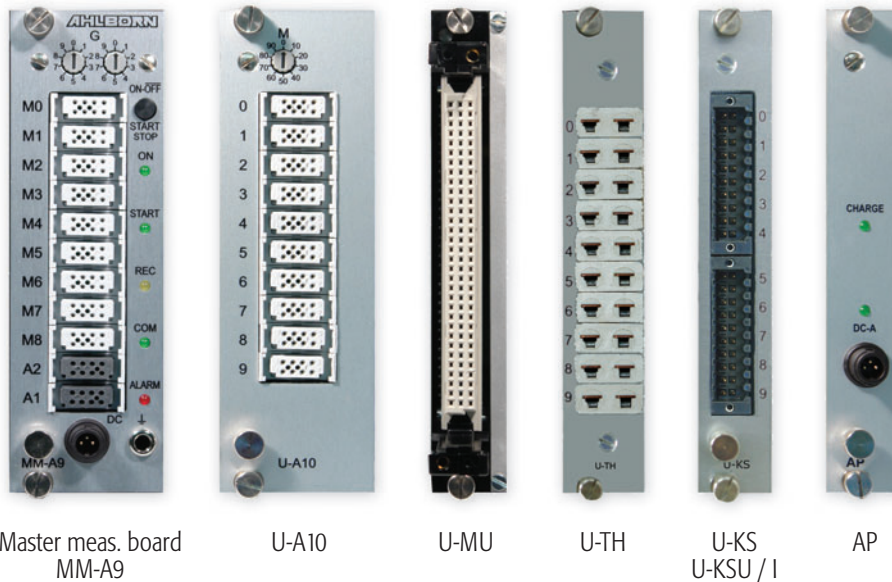
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ALMEMO® MEASURING INSTRUMENTS

Master measuring board, Selector switch boards and expansions for ALMEMO 5690-1M und 5690-2M

Our data acquisition systems are modular and can be individually configured for your specific measuring task.



Notes:
The extensions to the ALMEMO® 5690 system cannot be used with the predecessor versions, namely the ALMEMO® 5590 / 5990.

Technical Data and ordering information

<p>Master measuring board Channels A/D converter Sensor power supply</p>	<p>9 ALMEMO® input sockets, electr. isol., with semiconductor relays 9 primary channels, 27 additional channels for double sensors and function channels, 4 internal function channels delta-sigma, 24-bit, 2.5 / 10 / 50 measuring operations per second, electrically isolated Mains adapter, 12 V, maximum 400 mA, Rechargeable battery, 9 to 11 V, maximum 200 mA</p>
<p>Selector switch boards: U-A10</p>	<p>10 electrically isolated inputs for ALMEMO® flat connectors, 10 to 40 channels, with sensor supply, 2 plug-in slots</p> <p style="text-align: right;">Order No. ES5690UA10</p>
<p>U-MU</p>	<p>10 electrically isolated inputs, sensor connection with 10x MU connector, 10 to 40 channels, without sensor supply, ranges only, for all thermocouples, Pt100, Ni100, NTC, ohms, 2.6 V, 260 mV, 55 mV, 26 mV, 1 plug-in slot</p> <p>ALMEMO® 10-fold connector (see page 03.15)</p> <p style="text-align: right;">Order No. ES5690UMU Order No. ZA5690MU</p>
<p>U-TH</p>	<p>10 electr. isol. inputs for all thermocouples with miniature thermal connector, 10 to 40 channels, 1+1 plug-in slots (dummy panel needed)</p> <p style="text-align: right;">Order No. ES5690UTH</p>
<p>U-KS</p>	<p>10 electr. isol. inputs, sensor connection with clamp connector, 10 to 40 channels, without sensor supply, ranges only, Pt100, Ni100, NTC, ohms, 2.6 V, 260 mV, 55 mV, 26 mV, thermocouples with external cold junction, 1 plug-in slot</p> <p style="text-align: right;">Order No. ES5690UKS</p>
<p>U-KSU U-KSI</p>	<p>10 electrically insulated inputs, sensor connection with clamp connector, 10 to 40 channels, without sensor supply, all inputs for 10 V with 100:1 divider, incl. clamp connector, one slot all inputs for 20 mA with shunt, ranges mA and % (4 to 20 mA)</p> <p style="text-align: right;">Order No. ES5690UKSU Order No. ES5690UKSI</p>
<p>Expansion: AP</p>	<p>Rechargeable battery pack (8 cells NiMH, 1600mAh), 1 free slot with intelligent high-speed charging (3.5h)</p> <p style="text-align: right;">Order No. ES5690AP</p>

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Technical Data:

ALMEMO 5690-1M

Standard equipment

Operation	1 key, 5 LEDs, 2 coding switches	
Memory (option S)	Internal 512-KB EEPROM (100,000 measured values)	
Date and time-of-day	Real-time clock, buffered with lithium battery	
Outputs	2 ALMEMO®-sockets for all output moduls (analog, data, trigger, relais cable etc.) internal alarm transmitter	
Power supply	Mains adapter:	ZB1212NA6 100..240V, 12V DC, 5A
	DC adapter cable, electr. isolated	ZB3090-UK2, 10..30V, 12V DC, 1.25A
	Rechargeable battery pack	8 NiMH-Akkus 9..11V, 1600mAh

For further general data, see technical specifications, page 01.05.

ALMEMO 5690-2M

Standard equipment

Display	Graphics 128 x 128 dots, 16 rows, Lighting: 5 LEDs, 3 brightness levels	
Operation	9 keys (4 soft-keys and cursor block), 9 status LEDs on the front panel	
Memory	Multimedia card and USB card reader	
Memory (option S)	Internal 512-KB EEPROM (100,000 measured values)	
Date and time-of-day	Real-time clock, buffered with lithium battery	
Outputs	2 ALMEMO®-sockets for all output moduls (analog, data, trigger, relais cable etc.) internal alarm transmitter	
Power supply	Mains adapter:	ZB1212NA6 100..240V, 12V DC, 5A
	DC adapter cable, electr. isolated	ZB3090-UK2, 10..30V, 12V DC, 1.25A
	Rechargeable battery pack	8 NiMH-Akkus 9..11V, 1600mAh

For further general data, see technical specifications, page 01.05.

Accessories

Multimedia card min. 32 MB

ALMEMO® 10-fold connector (see page 03.15)

DC adapter cable, 10 to 30 VDC, 12 V / 1.25 mA, electr. isolated

Trigger and alarm cable (2 relays, 1 ohm, 300 mA, 50 V)

Relay adapter with 6 photo semiconductor relays as 19" plug-in unit

ALMEMO® data cable V24 interface, electrically isolated, max. 115.2kB

Ethernet data cable, electr. isol., max. 115.2 KB

Network cable, electr. isol., max. 115.2 KB

Carry case, aluminum profile frame / ABS for ALMEMO 5690 (see 07.07)

Rack case with carrying handle for ALMEMO 5690xxBT8 in 19-inch sub-rack (see 07.07)

More accessories, see section 'Output Modules and Network Technology'

Order No. ZB1904MMC

Order No. ZA5690MU

Order No. ZB3090UK2

Order No. ZA1000EGK

Order No. ES8000RTA2H

Order No. ZA1909DK5

Order No. ZA1945DK

Order No. ZA1999NK5

Order No. ZB5600TK3

Order No. ZB5090RC



Carry case, universal, high, aluminum profile frame for ALMEMO® 5690-1M/ -2M
Order No. ZB5600TK3



Rack case with carrying handle, for ALMEMO® MA5690xxBT8 measuring systems, in 19-inch sub-rack
Order No. ZB5090RC

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