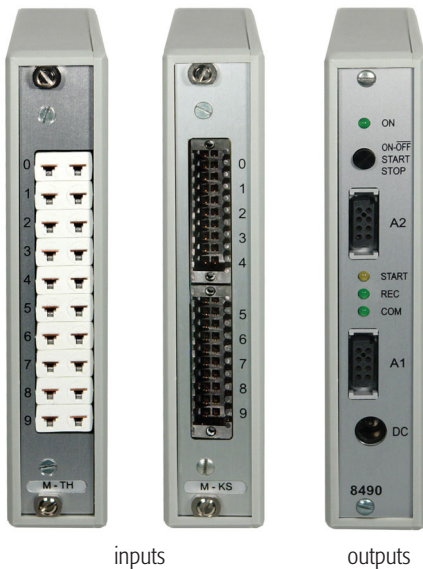


ALMEMO® 8490-TH and 8490-KS
data acquisition modules in 4-DU housing
with 10 measuring inputs, 2 outputs for RS232,
Ethernet, analog, memory
with external connector, and micro SD card
or internal 512-KB EEPROM (option S)



Technical Features:

- ▶ Type TH : 10 electrically isolated inputs for 10 sensors with thermocouples
 Type KS : 10 electrically isolated inputs with clamp connectors
 Type KSU : ditto, for 10-V signals
 Type KSI : ditto, for 20-mA signals
- ▶ 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 mops
New Electrically isolated between measuring inputs and supply
- ▶ Programming of sensor parameters in the device, can be modified via interface using the supplied AMR-Control software
- ▶ Measuring functions : Measured value, zero-setting, sensor adjustment, maximum / minimum values stored with date and time-of-day, smoothing, average values over time or measuring points, limit value monitoring, temperature compensation, atmospheric pressure compensation
- ▶ Cold junction measuring with 2 NTCs and interpolation (Type TH)
- ▶ New measuring ranges :
 Timer 6500.0 seconds, PT100 0.000 to 65.000 °C (Type KS)
- ▶ 4 LEDs for indicating various operating states
- ▶ Data logger with memory connector and micro SD card, recording in standard FAT16 file format, transmission to PC using card reader
- ▶ Option :
 EEPROM with capacity for 100,000 measured values, internally configurable as linear or ring memory
- ▶ Sleep mode for long-term recording
- ▶ Device programming using the supplied AMR-Control software, i.e. date and time-of-day, cycle, start and end of measuring, measuring rate, etc.
- ▶ Key for switching on and start / stop measuring

Technical Data:

Measuring inputs	
Type TH	10 inputs with miniature thermal sockets
Type KS	10 inputs with clamp connectors
Channels	10 primary channels, maximum 30 additional channels for double sensors and function channels (e.g. differential values)
Selector	electrically isolated, with semiconductor relays (50 V)
A/D converter	delta-sigma, 24-bit, 50 mops, electrically isolated see technical data, page 01.05
Outputs	
2 ALMEMO® sockets for all output modules (analog, data, trigger, relay cables, memory etc.)	
Standard equipment	
Operation	1 key
Memory	Ext. memory connector ZA1904MMC
Option S	Internal 512-KB EEPROM (100,000 measured values)
Date and time-of-day	Real-time clock, buffered with lithium battery
Power supply	
Mains adapter	ZB1112NA7 230 VAC to 12 VDC, 1A, electrically isolated
DC adapter cable	10 to 30 V, 250 mA ZB2290-UK electrically isolated
Current consumption without active mode	approx. 25 mA
Input and output modules Sleep mode	approx. 0.05 mA
Housing	
(LxWxH) 174 x 29 x 137 mm, polystyrene Weight 435 g	

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

Product overview :

Data acquisition module 8490-TH

4-DU housing, 10 inputs for all thermocouples with miniature thermal connectors and mV ranges, 2 outputs, real-time clock, and mains adapter 1A

MA8490TH

Option S Internal data memory, 512-KB EEPROM

OA8490S

Data acquisition module 8490-KS

4-DU housing, 10 inputs with clamp connectors (included), without sensor supply, ranges PT100, Ni100, NTC, ohms, 2.6 V, 260 mV, 55 mV, 26 mV, thermocouples with external cold junction, 2 outputs only, real-time clock, mains adapter 200 mA

MA8490KS

ditto, 10 inputs with 100/1 divider for 10-V signals only

MA8490KSU

ditto, 10 inputs with shunt for 20-mA signals only

MA8490KSI

Option S Internal data memory, 512-KB EEPROM

OA8490S

Option Q4 : 400 mops measuring rate (see 01.05)

SA0000Q4

Accessories

DC adapter cable, 10 to 30 VDC, 12 V / 250 mA, electrically isolated ZB2290UK
 Clamp connectors for ES5690UKS, 1 set (= 2 socket strips) ZB5600KS
 for connecting 10 sensors
 Memory connector with micro SD card (see p. 04.03) ZA1904SD
 Analog output cable, -1.25 to +2.0 V, 0.1 mV / digit ZA1601RK
 Socket strips (2 pieces) including dust cover for MA8490KS
 Trigger and alarm cable (2 relays, 1 Ω, 0.5A, 50 V) ZA1006EKG
 V24 data cable, electr. isolated, maximum 115.2 KB ZA1909DK5
 Ethernet data cable, electr. isol., max. 115.2 KB ZA1945DK
 Network cable, electr. isolated, maximum 115.2 KB ZA1999NK5
 Network technology, Bluetooth modules, see Chapter 05

03/2012 We reserve the right to make technical changes.