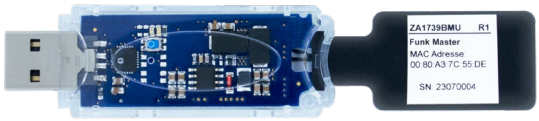
Wireless data connections with ALMEMO® radio modules ZA 1739-Bx

Wireless radio connection from a PC directly to an ALMEMO® measuring device ZA1739B-PVU.

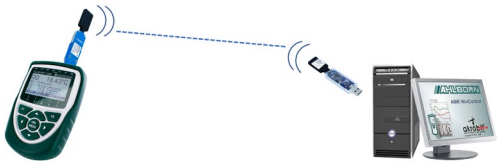


ZA1739BS



ZA1739BMU

Application:



1. Direct connection between ALMEMO® measuring instrument and PC

Wireless radio connection between two ALMEMO® measuring devices ZA1739BNV.



ZA1739BS



ZA1739BM

Application:

2. Connection of several ALMEMO® measuring devices among each other and wired connection to a PC



3. Connection of several ALMEMO® measuring devices among each other and wireless connection to a PC



* Alternatively also possible with WLAN connection ZA1739 WL

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Network Technology

Advantages of ALMEMO® connections with radio compared to other wireless technologies:

- The ALMEMO® wireless connections are delivered paired and ready configured: Simply plug in and measure!
- The radio technology used offers high transmission reliability.
- Due to the frequency hopping method used, a high robustness against interferences and coexisting WLAN networks is achieved. The wireless partners constantly switch between the available radio channels.
- Any number of wireless connections work reliably in parallel.
- There is almost no interference from coexisting WLAN networks.
- Once configured, connections are automatically (re) established when the device is switched on or when a connection is broken.
- If the wireless connection to the PC is interrupted, the USB-COM interface for the WinControl data acquisition software is maintained. This results in high transmission reliability for continuous monitoring.
- On the ALMEMO® wireless module there are control displays for power supply and status via LEDs.

Technical data:

Wireless features:	Wireless connection from a PC directly to an ALMEMO® measuring device with ALMEMO® radio module, or wireless connection between two ALMEMO® measuring devices.
Configuration:	Factory paired and preconfigured
Frequency band and channels:	2.4 GHz
Power supply:	Via ALMEMO® device
Current consumption:	approx. 60 mA at 12 V supply approx. 75 mA at 9 V supply approx. 100 mA at 6 V supply

Dimensions:	ZA1739BMU: approx. 110 mm x 22 mm x 8 mm ZA1739BS / ZA1739BM: approx. 102 mm x 25 mm x 8 mm
ALMEMO® Baud rate:	115.2 kBaud (fixed)
Operating conditions:	Operation: -10 °C to +50 °C
Type approval:	USA (FCC Part 15), Canada (IC RSS), EU (RED), Japan (MIC), China (SRRC), AU/NZS

Types

Order no.

Wireless radio PC connection for 1 ALMEMO® measuring device, paired and configured ready for operation:

ALMEMO® USB wireless module (master) ZA1739BMU for the USB interface on the PC
and ALMEMO® wireless module (slave) ZA1739BS for the output socket A1 on the ALMEMO® device **ZA1739BPVU**

Wireless radio connection between two ALMEMO® measuring devices, paired and configured ready for operation:

ALMEMO® wireless module (master) ZA1739BM for output socket A2 on the 1st ALMEMO® device
and ALMEMO® wireless module (slave) ZA1739BS for output socket A1 on 2nd ALMEMO® device **ZA1739BNV**

Wireless sensor connection via radio

Wireless sensor connection from a radio measuring device to a measuring input of a receiving ALMEMO® device with radio sensor module. Four measuring channels per connection can be transmitted. Any number of sensor connections in parallel is possible.



Sensor connection via radio sensor measuring device ALMEMO® 2790 with built-in radio module



MA 2790-BTFM



ALMEMO® 2790
with sensors for humidity,
temperature, atmospheric pressure
option OA 2790-RHA



ZA 1729-BTFS

- Connection of an ALMEMO® sensor to the measuring input M0 of the ALMEMO® wireless device.
- Connection of the plug-in sensor module to the input socket Mxx of a receiving ALMEMO® device.

Technical features:

- 1 measuring input for all ALMEMO® sensors.
- Optional: Integrated digital sensor for humidity, temperature, atmospheric pressure. Sensors can be plugged in, replaced and individually calibrated (without any measuring instrument).
- Power supply with 3 AA rechargeable NiMH batteries, with charging via the device itself. (Please order the mains unit separately)
- Power saving sleep mode (save-to-memory cycle starting at one minute). Operating time (per charged battery) up to 200 hours with memory cycle of 1 minute, respectively 1 year with memory cycle of 1 hour.
- Modern, compact housing, also for DIN rail mounting housing
- Generously dimensioned 2-row static 7 / 16 segment display including units
- Operating functions: cycle, keys can be locked via password, atmospheric pressure compensation.

Technical data MA 2790-BTFM

Measuring input:	1 ALMEMO® input socket
A/D converter, measuring ranges, standard equipment, housing: as for ALMEMO® 2490-1, but:	
Sensor supply:	6 / 9 / 12 V (depending on the programmed minimal sensor supply voltage in the ALMEMO® plug), max. 150 mA
Power supply: Rechargeable battery:	5 to 13 V DC not galvanically isolated. 3 AA rechargeable NiMH batteries, integrated charge circuitry
Current consumption:	approx. 14 mA with radio link (without sensor)
ALMEMO® socket DC:	for mains unit /interfaces
Wireless connection:	master module integrated

Accessories:	**Order no.**
mains unit 12 V / 2 A	**ZA1312NA10**
DC adapter cable 10 to 30 V DC, 12 V / 0.25 A galvanically isolated	**ZA2690UK**
DIN rail mounting	**ZB2490HS**

Option:	**Order no.**
Integrated digital sensor for humidity, temperate, atmospheric pressure, (technical data FHAD 46-C2 see chapter Air humidity)	**OA2790RHA**

Technical data ZA 1729-BTFS

Power supply:	via ALMEMO® measuring instrument, approx. 25 mA (9 V)
Module housing:	ALMEMO® plug, 61 x 20 x 8 mm (LxWxH), ABS

Variants

	Order no.
Paired wireless sensor connection (configured and ready-to-operate) with radio sensor measuring device ALMEMO® 2790, comprising:	
Radio sensor measuring device ALMEMO® 2790, 1 measuring input, integrated radio, including 3 AA rechargeable NiMH batteries (MA2790BTFM), and radio sensor plug-in module (ZA1729BTFS)	**MA2790BTFV**

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