

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

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



## Wireless radio connection between two ALMEMO® measuring devices ZA1739BNV.





ZA1739BS



#### **Application:**



\* Alternatively also possible with WLAN connection ZA1739 WL



## ALMEMO<sup>®</sup> Network technology

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

- The ALMEMO<sup>®</sup> wireless connections are delivered paired and Once configured, connections are automatically (re) 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.
- 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 <sup>®</sup> measuring device with AL- MEMO <sup>®</sup> radio module, or wireless connection between two ALMEMO <sup>®</sup>	Dimensions:	ZA1739BMU: approx. 110 mm x 22 mm x 8 mm ZA1739BS / ZA1739BM: approx. 102 mm x 25 mm x 8 mm
	measuring devices.	ALMEMO <sup>®</sup> Baud rate:	115.2 kBaud (fixed)
Configuration:	Factory paired and preconfigured	Operating conditions:	Operation: -10 °C to +50 °C
Frequency band and channels: 2.4 GHz		Type approval:	USA (FCC Part 15), Canada (IC RSS), EU
Power supply:	Via ALMEMO <sup>®</sup> device		(RED), Japan (MIC), China (SRRC), AU/
Current consumption:	approx. 60 mA at 12 V supply approx. 75 mA at 9 V supply approx. 100 mA at 6 V supply		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** 

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## ALMEMO<sup>®</sup> Network technology

## Wireless sensor connection via radio

Wireless sensor connection from a radio measuring device to a measuring input of a receiving ALMEMO<sup>®</sup> 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<sup>®</sup> 2790 with built-in radio module





MA 2790-BTFM ALMEMO® 2790 ZA 1729-BTFS with sensors for humidity, temperature, atmospheric pressure option OA 2790-RHA

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

#### **Technical features:**

- 1 measuring input for all ALMEMO<sup>®</sup> 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 <sup>®</sup> input socket		
A/D converter, measuring ranges, standard equipment, housing: as for ALMEMO <sup>®</sup> 2490-1, but:			
Sensor supply:	6 / 9 / 12 V (depending on the programmed minimal sensor supply voltage in the ALMEMO <sup>®</sup> 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 <sup>®</sup> 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 DIN rail mounting	ZA2690UK ZB2490HS
<b>Option:</b>	Order no.
Integrated digital sensor for humidity, temp	berate, atmospheric

pressure, (technical data FHAD 46-C2 see chapter Air humidity) OA2790RHA

#### **Technical data ZA 1729-BTFS**

Common technical data see page 117		
Power supply:	via ALMEMO <sup>®</sup> measuring instrument,	
	approx. 25 mA (9 V)	
Module housing:	ALMEMO <sup>®</sup> plug,	
	61 x 20 x 8 mm (LxWxH), ABS	

#### Variants

Paired wireless sensor connection (configured and ready-to-operate) with radio sensor measuring device ALMEMO<sup>®</sup> 2790, comprising:

Radio sensor measuring device ALMEMO<sup>®</sup> 2790, 1 measuring input, integrated radio, including 3 AA rechargeable NiMH batteries (MA2790BTFM), and radio sensor plug-in module (ZA1729BTFS) MA2790BTFV

#### Order no.

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