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

Wireless Bluetooth connection from a PC directly to an ALMEMO[®] measuring device ZA1739BPVU.



Wireless Bluetooth connection between two ALMEMO® measuring devices ZA1739BNV.





ZA1739BM

ZA1739BS



Application:



* Alternatively also possible with WLAN connection ZA1739 WL

new

ALMEMO[®] Network technology

Advantages of ALMEMO[®] connections with Bluetooth compared to other wireless technologies:

- The ALMEMO[®] Bluetooth connections are delivered paired and ready configured: Simply plug in and measure!
- The Bluetooth radio technology used (version 4.2) offers high transmission reliability.
- Due to the frequency hopping method used, a high robustness against interferences and coexisting WLAN networks is achieved. The Bluetooth partners constantly switch between the available radio channels.
- Any number of Bluetooth 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 Bluetooth 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[®] Bluetooth module there are control displays for power supply and status via LEDs.

Technical data:

Bluetooth features:	s: Wireless connection from a PC directly to an ALMEMO [®] measuring device with AL- MEMO [®] Bluetooth module, or wireless connection between two ALMEMO [®] measuring devices.	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
Configuration:		Dimensions:	ZA1739BMU: approx. 110 mm x 22 mm x 8 mm ZA1739BS / ZA1739BM: approx. 102 mm x 25 mm x 8 mm
Standards:	Bluetooth Core Specification version 4.2 (BR/EDR/Bluetooth LE) Bluetooth LE Central and Peripheral Roles Support for Generic Access Profile (GAP), Generic Attribute Profile (GATT), Device ID Profile, Serial Port Profile (SPP)		
		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
Frequency band and channels: 2.4 GHz, 3 Advertising Channels and 37 Data Channels			(RED), Japan (MIC), China (SRRC), AU/ NZS
Encryption:	AES/CCMP and TKIP encryption, WPA/WPA2 Personal WPA2 Enterprise (EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST) WPA3-Enterprise Transition Mode and WPA3-Personal (requires firmware v5.0.0.0 or later) SSLv3/TLS 1.2 with PKI and X.509 Certi- ficates (up to 4096-bit Keys) AES Algorithm 256-bit 192-bit 128-bit		

Types

Order no.

Wireless Bluetooth PC connection for 1 ALMEMO® measuring device, paired and configured ready for operation: ALMEMO® USB Bluetooth module (master) ZA1739BMU for the USB interface on the PC and ALMEMO® Bluetooth module (slave) ZA1739BS for the output socket A1 on the ALMEMO® device ZA1739BPVU

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

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