



# Operating instructions

## ALMEMO<sup>®</sup> Bluetooth modules ZA 1739-BNV / ZA1739-BPVU

English  
V1.2  
12.10.2023

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## 2 Explanation of symbols



Notice



Result

Back

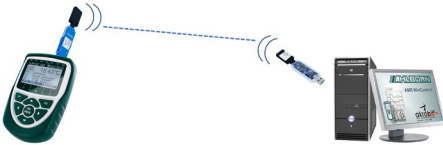
Text displayed within a software

# 3 Product

The ALMEMO® Bluetooth connections ZA1739 BPVU (PC connection) and ZA1739 BNV (network connection) are used to establish a wireless connection between an ALMEMO® measuring device and a PC or alternatively between several ALMEMO® measuring devices. The following figures show some typical networking examples.

## Examples of networking with ALMEMO® Bluetooth modules

- 1. Direct connection between ALMEMO® measuring instrument and PC



- 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

## 4 Connection options of the ALMEMO® Bluetooth modules

### 4.1 Connecting the ALMEMO® measuring device to a PC via ALMEMO® Bluetooth module (ZA1739 BPVU)

- ☞ For a secure connection it is necessary that the modules are only plugged in when the ALMEMO® measuring device is switched off (no hot plugging). First, the measuring device is switched on with the ZA1739BS and then (slightly delayed, a few seconds) the ZA1739BMU master module is connected to the USB interface of the PC.

#### **Connect measuring device with Bluetooth module (slave)**

1. Plug the ALMEMO® Bluetooth module ZA1739BS into the A1 socket of an ALMEMO® measuring device.
2. Switch on the ALMEMO® measuring instrument.
  - The green LED of the ALMEMO® Bluetooth module lights up and the orange LED flashes.
  - After some time, the green and orange LEDs of the ALMEMO® Bluetooth module light up.


#### **Connect PC with Bluetooth module (master)**

- ☞ Before connecting the Bluetooth module (master) to a PC, the driver for the USB interface must be installed. The driver is available at the following link.  
<https://www.ahlborn.com/en/treiber/treiber-usb-datenkabel-za-1919>
3. Connect a PC with the ALMEMO® Bluetooth module ZA1739BMU.
    - ☞ The connection between the ALMEMO® Bluetooth modules ZA1739BMU and ZA1739BS is established automatically.


## 4 Connection options of the ALMEMO® Bluetooth modules

### Establish connection with ALMEMO® measuring device

4. In the software with which you want to address the ALMEMO® measuring device (e.g. WinControl, ALMEMO® Control ...), select the corresponding COM interface.

 The baud rate in the ALMEMO® Bluetooth module is preset to 115 200 baud. This baud rate cannot be changed. Set this also at the PC and do not change it.

## 4.2 Networking ALMEMO® measuring devices via ALMEMO® Bluetooth modules (ZA1739 BNV)

 For a secure connection it is necessary that the modules are only plugged in when the ALMEMO® measuring device is switched off (no hot plugging) and that the measuring devices are switched on slightly delayed, namely first the measuring device with the slave module, then (after a few seconds) the measuring device with the master module.

### Connect measuring device with Bluetooth module (slave)

1. Plug the ALMEMO® Bluetooth module ZA1739BS into the socket A1 of the first ALMEMO® measuring device (slave).
2. Switch on the ALMEMO® measuring instrument.
  - The green LED of the ALMEMO® Bluetooth module lights up and the orange LED flashes.
  - After some time, the green and orange LEDs of the ALMEMO® Bluetooth module light up.

### Connect measuring device with Bluetooth module (master)

3. Plug the ALMEMO® Bluetooth module ZA1739BM into socket A2 of the second ALMEMO® measuring device (master).
4. Switch on the ALMEMO® measuring instrument.
  - The green LED of the ALMEMO® Bluetooth module lights up and the orange LED flashes.
  - After some time, the green and orange LEDs of the ALMEMO® Bluetooth module light up.

- ☞ The connection between the ALMEMO® Bluetooth modules ZA1739BM and ZA1739BS is established automatically.

### **Connect PC with Bluetooth network**

5. The connection of the ALMEMO® Bluetooth network to a PC can be realized for example via the following connections.
    - ALMEMO® Bluetooth connection ZA1739 BPVU
    - ALMEMO® WLAN connection ZA1739 WL
    - ALMEMO® Data cable ZA1919 DKU
    - ALMEMO® Ethernet connection ZA1945 DK
- ☞ Select the corresponding COM interface in the software with which you want to address the ALMEMO® measuring instruments. The baud rate is preset to 115 200 baud and cannot be changed. Set this also on the PC and do not change it.

# 5 Technical data

<b>Bluetooth features:</b>	Wireless connection from a PC directly to an ALMEMO® measuring device with ALMEMO® Bluetooth module, or wireless connection between two ALMEMO® measuring devices.
<b>Configuration:</b>	Factory paired and preconfigured
<b>Standards:</b>	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)
<b>Frequency band and channels:</b>	2.4 GHz, 3 Advertising Channels and 37 Data Channels
<b>Power supply:</b>	Via ALMEMO® device
<b>Current consumption:</b>	approx. 60 mA at 12 V supply approx. 75 mA at 9 V supply approx. 100 mA at 6 V supply
<b>Dimensions:</b>	ZA1739BTM: approx. 110 mm x 22 mm x 8 mm ZA1739BTS: approx. 102 mm x 25 mm x 8 mm
<b>ALMEMO® Baud rate:</b>	115.2 kBaud (fixed)
<b>Operating conditions:</b>	Operation: -10 °C to +50 °C
<b>Type approval:</b>	USA (FCC Part 15), Canada (IC RSS), EU (RED), Japan (MIC), China (SRRC), AU/NZS



# 6 Certificate of conformity



Doc-Nr. CE\_ZA1739B\_001\_20230522\_R1.doc

## EU-Konformitätserklärung

### EU-Declaration of Conformity

nach/according to EN 17050-1

Hersteller: Ahlborn Mess- und Regelungstechnik GmbH  
Manufacturer:  
Adresse: Eichenfeldstrasse 1  
Address: 83607 Holzkirchen  
Germany

bestätigt, dass das Produkt  
*declares, that the product*

Produktbezeichnung: ALMEMO® Bluetooth-Modul  
Product Name:  
Produkt Typ: ZA1739 BPVU, ZA1739 BNV  
Product Type:  
Produkt Optionen:  
Product Options: Alle/all

den nachfolgenden Europäischen Anforderungen und Richtlinien entspricht und folglich das CE Zeichen trägt.  
*conforms to following European Product Specifications and Regulations and carries the CE marking accordingly.*

2014/30/EU EMV Richtlinie  
EMC Directive  
2014/53/EU R&TTE Richtlinie  
R&TTE Directive  
Angewandte harmonisierte Normen EMV (EMC)  
und technische Spezifikationen: EN 61326-2-3: 2013 Tabelle 2  
*Applied harmonised standards and technical specifications:*

Holzkirchen, 23.05.2023  
Ort, Datum der Ausstellung  
*Place, date of issue*

  
Entwicklungsleitung

  
Qualitätsmanagement

Notes

Besides greatest diligence,  
the possibility of incorrect information cannot be excluded!  
Subject to technical modifications without prior notice!

You will find the present and further Operating Instruction,  
as well as the ALMEMO® Manual  
on **www.ahlborn.com** under the tab  
**SERVICE** on **DOWNLOADS**

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PLEASE KEEP THIS INSTRUCTION MANUAL  
FOR FURTHER REFERENCE