GB

30 014 046 - **2**

Eltako ELECTRONICS

Bus gateway

BGW14

Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock!

Temperature at mounting location:
-20°C up to +50°C.
Storage temperature: -25°C up to +70°C.
Relative humidity:
annual average value <75%.

valid for devices from production week 23/19 (see bottom side of housing)

RS485 bus gateway. Bidirektional. Bidirectional. Only 0.3 watt standby loss. Modular device for DIN-EN 60715 TH35 rail mounting. 1 module = 18 mm wide, 58 mm deep.

Connection to the Eltako-RS485 bus. Bus cross wiring and power supply with jumper.
Operation in conjunction with FAM14 or FTS14KS.

The Hold terminal is connected to the FAM14 or the FTS14KS.

Up to 16 sensors, e.g. BUTH65D/12 V DC, BBH65/12 V DC, BTR65H/12 V DC and BTF65/12 V DC can be connected to the RSA/RSB terminals. Data transmission and power supply takes place over the 4-wire bus with a 12 V DC power supply unit. Standard telephone wire is sufficient as connecting lead: (J-Y (ST) Y 2x2x0,8 mm²) or equivalent.

The permitted maximum line length is 1000 m. The second 120 Ω terminal resistor must also be connected to the RSA/RSB terminals of the remotest sensor.

With up to 8 BGW14 devices, the data of up to 128 sensors can be fed to the RS485 bus.

The **operating mode rotary switch BA** of each BGW14 device must be set to a different position.

Bus output ID at Pos. 1 =
0x1900+sensor address
Bus output ID at Pos. 2 =
0x1920+sensor address
Bus output ID at Pos. 3 =
0x1940+sensor address
..
Bus output ID at Pos. 8 =
0x19E0+sensor address

The BGW14 queries all connected sensors cyclically and the sensors reply with a data telegram. The data is compared with the previous data and the data is only output to the RS485 bus if there is a change. If data is recurring, the connected sensors output status telegrams cyclically every 5 minutes.

The green LED lights up continuously when a connection to the FAM14 or FTS14KS is set up with PCT14 and lights up briefly when data is output to the RS485 bus.

If a default setpoint is sent to a connected BUTH by wireless, e.g. from a MiniSafe, the BGW14 must receive a device address from the FAM14.

The transmitting wireless ID can then be entered in the PCT14 (Version 8.1 and higher) for every BUTH connected in the BGW14.

Issue device address for the BGW14:
Turn the upper rotary switch on the FAM14 to Pos. 1. The lower LED lights up red.

Turn the rotary switch of the BGW14 to Pos. 10. The green LED on the BGW14 flickers slowly.

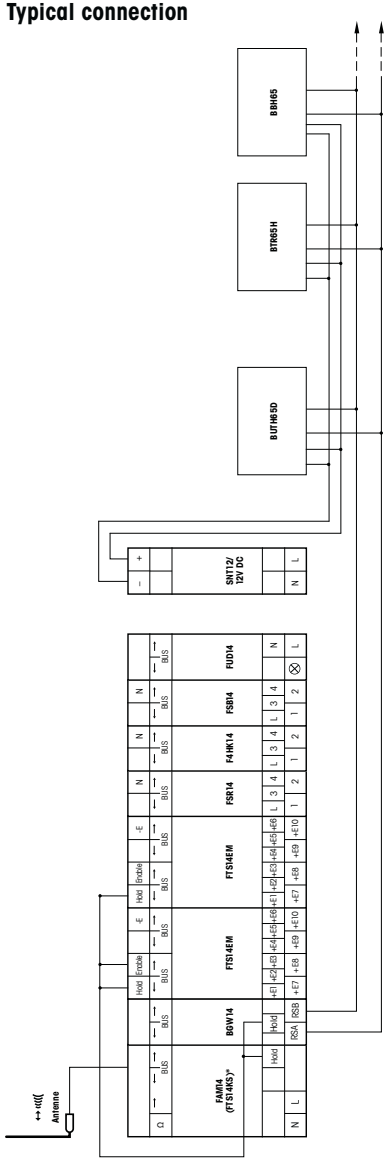
After the address is issued by the FAM14, its lower LED lights up green for 5 seconds and the LED on the BGW14 goes out.

Clear all wireless IDs:
Turn the rotary switch to right stop and back 5 times within 10 seconds (turn clockwise). The green LED lights up for 10 seconds and goes out. All wireless IDs are cleared.

Clear all wireless IDs and the device address in the BGW14:
Turn the rotary switch to right stop and back 8 times within 10 seconds (turn clockwise). The green LED lights up for 10 seconds and goes out.

All wireless IDs and the device address in the BGW14 are cleared.

Typical connection



* alternatively FTS14KS without bidirectional wireless

The second terminating resistor supplied with the FAM14 or FTS14KS must be plugged into the last RS485-bus user. Use the PCT14 PC tool to make additional actuator setting options for conventional pushbuttons. Up to 16 sensors BUTH65D, BBH65, BTR65H and BTF65 can be connected to the BUS gateway. A single 4-wire line supplies the bus sensors with power and also transfers the data. The user may select any topology for the 4-wire connection.

For star-shaped wiring where the BGW14 is in the neutral point, the terminating resistor must be removed from the RS terminals. The two terminating resistors must then be connected to the last device of the two longest lines.

Must be kept for later use!
We recommend the housing for operating instructions GBA14.

Eltako GmbH

D-70736 Fellbach

Technical Support English:
☎ Michael Thünte +49 176 13582514
✉ thuente@eltako.de
☎ Marc Peter +49 173 3180368
✉ marc.peter@eltako.de

eltako.com

22/2019 Subject to change without notice.