

BlueBox R1 Controller

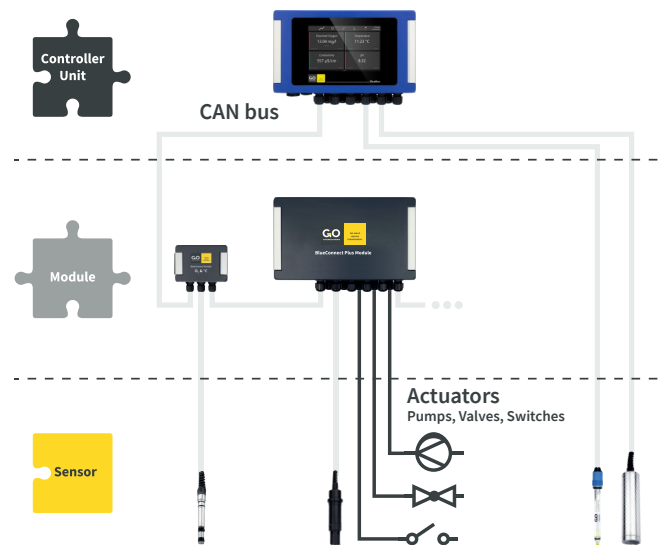
The **BlueBox R1 Controller** is a modular and expandable base for monitoring and control tasks of all dimensions. It allows the management of extensive sensor and actuator networks.

With the help of the BlueBox as a central interface, the integration and connection of further systems can easily be accomplished. A connection via internet or mobile networks facilitates the transmission of measurement data and results at any time and allows for remote access and control of the system.



The BlueBox System

The compatibility of the BlueBox System allows to easily set up complex measurement networks. Individual components can easily be linked via a fieldbus connection and allow for the expansion of the system. So, whether you have only one measurement point or a whole grid of measurement points - the BlueBox is the solution!



Functions & Features



Monitoring Function



Control Function (PLC)



Plug & Play [Smart Sensor]



Remote Access & Control



Intelligent Event Handling



Cloud Data Service



Modular & Expandable



CAN bus & Modbus

Technical data

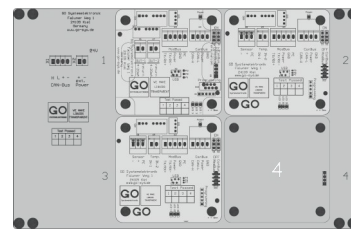
| | |
|-----------------------------|-------------------|
| Power supply | 24 V DC |
| Power consumption (typical) | 5 W |
| Dimensions (wxhxd) | 330 x 220 x 93 mm |
| Weight | approx. 3 kg |
| IP protection class | IP 65 |
| Memory | 8 GB |
| Colour Touch Display | 7 inch |
| Ambient temperature | -20 to +45 °C |
| Art. no. | 486 00R1 |

Modular Design

The modular design of the BlueBox R1 Controller offers the option to integrate up to four freely selectable **BlueConnect Sensor or I/O cards**. The controller can thus be individually configured for your specific requirements or can subsequently be upgraded.

Interfaces

- 1x RS-232/RS-485 (with power supply 12V, 6W) as interface or connection of sensors with RS-232/RS-485 port
- 1x CAN bus for connection of additional modules
- 1x Ethernet [TCP/IP], Modbus [TCP/IP]
- 1x USB
- 4x Slots for a freely selectable **BlueConnect Sensor or I/O Cards** (e.g. analogue pH or 2x 4-20 mA Output) [optional]
- GPRS / UMTS / LTE / 4G modem [optional]
- WLAN [optional]



Example configuration with three BlueConnect cards.

BlueConnect Sensor Cards for the connection of the following sensors

| Variants | Art. no. | Sensor Art. no. |
|---|--------------|---|
| Galvanic Oxygen [GO] | 410 CS00-4 | 461 400X |
| Analogue pH with/without Temperature (PT1000) | 410 CS00-5 | 461 5XXX* |
| Analogue ISE (e.g. NH4 or NO3) | 410 CS00-7 | 461 7XXX* |
| Analogue Redox (ORP) | 410 CS00-9 | 461 9XXX* |
| Modbus [GO] | 410 CS00-MOD | 461 6200 / 461 6780 / 461 2092 / 461 4610 |

BlueConnect I/O Cards for the following in- & outputs

| Variants | Art. no. |
|-------------------------------------|--------------|
| 2x 4-20 mA Output | 410 CI00-AO2 |
| 2x Relay Output (24 VDC; 2 A) | 410 CI00-REL |
| 2x 4-20 mA Input | 410 CI00-AI2 |
| 2x Pulse Input (PNP/NPN selectable) | 410 CI00-PI2 |
| 2x Digital Input | 410 CI00-DI2 |
| Modbus RS232 (12 VDC; 6 W) | 410 CI00-S12 |

* or analogue sensors of other manufacturers