

TriBox 3 Controller

Digital sensors



4-channel display and control unit for digital sensors

Digital controller equipped with 4 RS232 or RS485 type sensor interfaces, allowing the supply of probes, reception, display (digital or graphic) and recording of measurement data.

The TriBox 3 has Modbus / RTU protocol for communication with sensors and also responds to Modbus / TCP commands. It thus offers several communication interfaces such as an IEEE 802.3 Ethernet connection, WiFi 802.11 b / g / n, a USB port, a programmable relay output and six 4 ... 20 mA analog outputs.

An integrated solenoid valve can be used to control a compressed air injection for automatic cleaning of optical sensors.

The TriBox 3 is compatible with all TriOS digital sensors, the measurement and configuration data of the sensors may be accessed on the screen and from a web browser once connected to the controller via WiFi or Ethernet.

It is suitable for all applications in the fields of environmental monitoring, drinking water production and wastewater treatment plants as well as many other fields, with its low power consumption, aluminum housing and multiple interfaces.

Advantages

- Open communication Modbus / RTU
- Access to 6 measurements in 4 ... 20 mA analog format
- Suitable for all TriOS digital sensors
- Recording of measurement data and service log
- Wifi connection for interface access on web browser
- TCP / IP interface
- Large capacitive touch screen
- Outdoor installation allowed
- Integrated solenoid valve for compressed air network



The TriBox 3 is equipped with four sensor inputs with M12 locking screw connectors.

The analog outputs and relay contact are connected by the cable glands providing access to the connection terminal blocks inside the controller. A compressed air circuit can be connected to the internal solenoid valve, directly by connecting the inlet / outlet hoses to the quick connect adapter under the TriBox.

The display of the different measurements is fully configurable by the user.

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Technical specifications

Input voltages	100 ... 240 VAC (50 ... 60 Hz), 10 ... 15 VDC
Consumption	Standard : 6W, max : 50 W
Sensor connector	4 x M12 industrial connectors with locking screws
Standard	RS-232, RS-485
Protocol	Modbus-RTU, TriOS protocol
RTU server	Yes (on each sensor)
RTU Client	Yes (on each sensor)
RTU settings	Adjustable (default: 9600-8-N-1)
Standard	Ethernet, WiFi IEEE 802.11b/g/n
Connection	1 x RJ-45, built-in WiFi antenna
Protocol	TCP/IP, Modbus TCP, VNC
Web interface	Yes
USB	USB 2.0, USB A socket
Analog output	6 x configurable analog outputs 4 ... 20 mA
Load	Max. 500 Ohms
Connection terminals	1,5 mm ² 16 AWG
Relay specs	1 x changeover relay contact (SPDT) / 250 VAC, 2 A / 30 VDC, 2 A
Connection terminals	Max. 2,5 mm ² Max. 14 AWG
Valve	Integrated with safety rings for front connection
Screen	7 'capacitive touch (800 x 480 pixels)
Status	5 x status LED on the front
Data storage	2 GB microSD card, direct connection with USB stick possible
Data export	WiFi (compressed .tar file) / Ethernet / USB 2.0
Operating temperature	-10 ... +50 ° C (with pre-installed cable +5 ... +40 ° C)
Storage temperature	-20 ... +70 ° C
Max humidity air in use	95%
Type	IP65
Dimensions	280 x 170 x 94 mm
Weight	3,7 kg
Materials	Die-cast aluminum alloy housing, acrylic glass (PMMA) front panel

Accessories: Junction box

This adapter equipped with 5 M12 connectors allows TriBox controllers to control even more sensors.



AirShot

Mini compressed air compressor for cleaning optical sensors. Operates with air pulses against continuous air flow, allowing a compact design. The system drains the internal air circuit between two pulses to prevent formation of frost in winter in hoses and solenoid valve.

