

## TriBox3

10C000000

Digital 4-channel display and control unit with integrated solenoid valve for compressed air control

TriBox3 is a measurement and control system for all TriOS sensors. The unit offers 4 sensor channels with selectable RS-232 or RS-485 interface. In addition to Modbus-RTU, various other protocols are available. A built-in valve allows the use of a compressed air purge for the sensors. In addition, the TriBox3 offers various interfaces, including an IEEE 802.3 Ethernet interface, an IEEE 802.11 b/g/n interface, a USB connection and 6 analogue outputs (4–20 mA). An integrated relay can be used to trigger alarms or control external devices. Low power consumption, a robust aluminium



housing and a range of interfaces make the TriBox3 ideal for all applications in environmental monitoring, drinking water, waste water treatment plants and many other areas.

### Advantages

- open Modbus RTU communication
- for all digital TriOS sensors
- cost-effective alternative to analogue measuring points
- integrated data logger with service logbook
- WiFi for communication
- USB interface
- TCP/IP interface
- Modbus RTU server
- also available without WiFi

2016-04-15 14:16:50 9403		System Info		Messautomatik aus	
SAK254 LISA_305C	CSBeq LISA_305C	BSBeq LISA_305C			
<b>36.25</b>	<b>52.93</b>	<b>17.40</b>			
1/m	mg/l	mg/l			
14:15:37	14:15:37	14:15:37			
TOCeQ LISA_305C	TRANS254 LISA_305C	TRANS530 LISA_305C			
<b>21.17</b>	<b>27.25</b>	<b>62.79</b>			
mg/l	%	%			
14:15:37	14:15:37	14:15:37			

### Technical specifications

#### POWER SUPPLY

<b>Voltage supply</b>	100–240 VAC, 50–60 Hz, 12–24 VDC (± 5 %)
<b>Power consumption</b>	Type: 6 W, max: 50 W
<b>Protection class</b>	1
<b>Overvoltage category</b>	II

#### SENSOR INTERFACES

<b>Connection</b>	4x M12 industrial connectors for TriOS sensors
<b>Standard</b>	RS-232, RS-485
<b>Protocol</b>	Modbus-RTU, TriOS

## MODBUS RTU

Server RTU	yes (on each sensor connector)
Client RTU	yes (on each sensor connector)
Parameters	Adjustable (default: 9600-8-N-1)

## MODBUS TCP

Server TCP	yes
TCP port	Adjustable (default: 502)

## NETWORK/USB

Standard	Ethernet, WiFi based on IEEE 802.11b/g/n
Connection	1 RJ-45 integrated WiFi antenna (for TriBox3 with WiFi)
Protocol	TCP/IP, Modbus TCP, VNC
Web interface	no
USB	USB 2.0 (Host), USB-A socket

## ANALOG INTERFACES

Analog Output	6 analogue outputs, configurable: 4–20 mA
Load	max. 500 Ω
Connection terminals	1.5 mm <sup>2</sup>   16 AWG
Error indicator	0 mA

## SWITCH INPUT/OUTPUT

Measurement trigger	Trigger for global measurement (galvanically isolated), Control voltage: 12–24 VDC (±5 %)   Control voltage: 12–24 VDC (±5 %) Connection terminal: 1.5 mm <sup>2</sup> (AWG 16)   Connection terminal: AWG 16
Control voltage	no

## RELAY OUTPUTS

Electrical specification	1 x relay changeover contact (SPDT) / 250 VAC, 2 A / 30 VDC, 2 A
Connection terminals	max. 2.5 mm <sup>2</sup>   max. 14 AWG

## COMPRESSED AIR CLEANING

Valve	integrated, max. air pressure: 5 bar
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## DISPLAY

Display	7" capacitive touch-display (800x480 pixels)
LED	5 status LEDs

## DATA STORAGE

Storage medium	internal 8 GB microSD card, direct logging to USB stick possible.
Data Export	via USB 2.0 Host

## ENVIRONMENT

<b>Operating temperature</b>	-10 °C to +50 °C (with pre-installed mains power cable +5 °C to +40 °C)	~ +14 °F to +122 °F (with pre-installed mains power cable +41 °F to +104 °F)
<b>Storage temperature</b>	-20 °C to +70 °C	~ -4 °F to +158 °F
<b>Relative air humidity</b>	0–95 % (not condensing)	
<b>Protection type</b>	IP65	NEMA 4X
<b>Pollution level</b>	2	

## MECHANICAL SYSTEM

<b>Dimensions (width x height x depth)</b>	280 x 170 x 94 mm	~ 11" x 6.7" x 3.7"
<b>Weight</b>	3.7 kg	~ 8.2 lbs
<b>Materials</b>	Housing: aluminium die-cast alloy, front panel: acrylic glass (PMMA)	