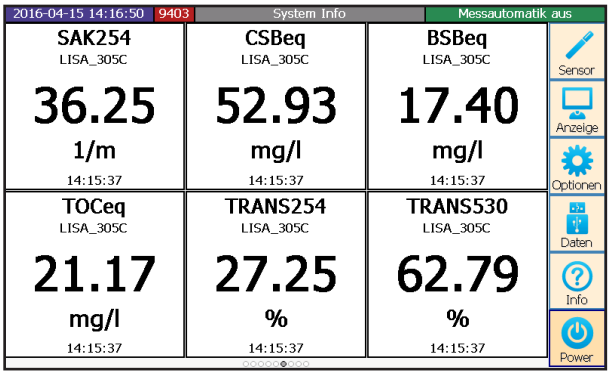
TriBox3

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

Technical specifications

POWER SUPPLY

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

SENSOR INTERFACES

Connection	4 M12 industrial connectors for TriOS sensors
Standard	RS-232, RS-485
Protocol	Modbus-RTU, TriOS

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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 mm²	16 AWG
Error indicator	0 mA	
SWITCH INPUT/OUTPUT		
Measurement trigger	Trigger for global measurement (galvanically isolated), Control voltage: 12...24 VDC (± 5%) Connection terminal: 1.5 mm² (AWG 16)	Control voltage: 12...24 VDC (± 5%) 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 mm²	max. 14 AWG
COMPRESSED AIR CLEANING		
Valve	integrated, max. air pressure: 5 bar	
DISPLAY		
Display	7” capacitive touch-display (800x480 pixels)	
LED	5 status LEDs	
DATA STORAGE		
Storage medium	internal 2 GB microSD card, direct logging to USB stick possible.	
Data Export	via USB 2.0 Host	

ENVIRONMENT

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

MECHANICAL SYSTEM

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