

ISA T3 - In Situ Spectral Analyser, modular

consists of:

1. BlueBox T3 (Art. No.: 486 0003-GO-XX-XX-XX)
2. spectrometer module with measuring head (Art. No.: 486 6002-XX-XX)

1. BlueBox T3

programmable logic controller:

touch panel, LCD graphic display 240x128 pixel

operating system: embedded Linux, version: logo GO

Available operating system languages:

English, German, France and Spain, other on request.

circular buffer for programs and measured data

standard 256MB optionally 512MB / 2GB

interfaces:

1 X RS232/RS485 (eg. Modbus RTU)

1 x CAN

1 x Ethernet 10/100MBit

1 X USB

optionally UMTS module

outputs: variable, see table

2 x current output 4...20mA

description:

all in- and outputs are pluggable

aluminium housing: 280 mm x 170 mm x 90 mm, IP 65

colour: blue powdered RAL 5010

weight: 2.6 kg,

storage temperature range: -10°C...+50°C

operating temperature range: -20°C...+45°C;

The system is designed for the connection of up to 200 sensors and actuators.

Number of activated virtual sensors: variable, see table

power supply: 24 V DC (18-36 V DC), 3.2 A

(The power supply unit is not included in the delivery!)

required accessories:

- 24 V DC, 3.2 A power supply unit art. no.: 486 K00X

optional accessories:

- BlueBox pc software art. no.: 420 6210

- UMTS modem Art. Nr. 486 Z008-X

- Upgrade Virtual Sensors Art. No.: 420 630X

- BlueGate Web Service, allocation of an internet data server Art. Nr. 420 6601

2. InSitu spectral Analyzer - ISA II -

In situ spectral analyzer - ISA - K3 ATEX

ISA is an InSitu submersible Spectrum Analyzer.

measurements: UV VIS spectra in range 200 - 708 nm

resolution 2nm; Measurement principle: Spectral analyser

measuring interval min.: 30 sec.; Light source: Xenon flash light

device concept:

purely optical sensor head with optical fiber connection

remotely transferable calibration algorithms for parameter calculation

comprehensive software for performing calibrations is available

all calibration settings are accessible

accessible raw spectra

path length from 0.5 to 20 mm freely adjustable

Automatic cleaning by air flushing and valve for connection

to a compressed air line is included in the delivery

areas of application:

process control, waste water monitoring, water quality and environmental monitoring, etc.

Spectrometer Module:

Power supply: 24VDC (18-36 V DC)

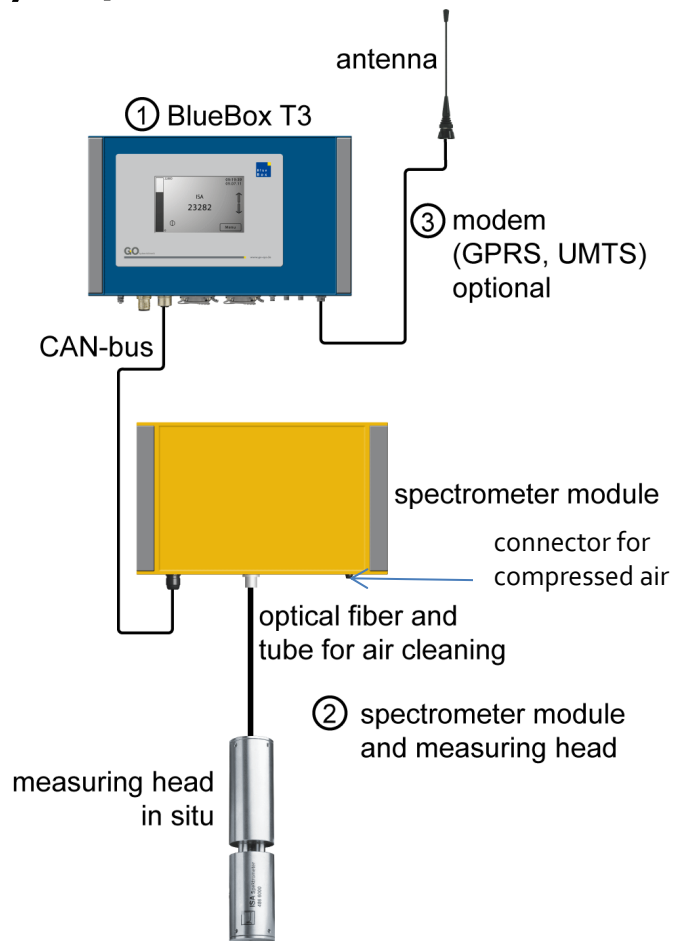
Compressed air connector: quick connector for 4mm PU-tube, 4-6 bar

Temperature range: 0°C to +40°C

Weight: 2.6kg

Aluminium housing: 280 mm x 170 mm x 90 mm, IP 65

Colour: yellow powdered RAL 1018



Data Sheet

Optical Fibre with integrated tube for compressed air cleaning:

Pure fused silica fibres surrounded by galvanized steel metal tube and covered with cross-linked semi-rigid polyolefin shrinking tube

Fittings: stainless steel (1.4305)

weight ca. 225g/m

length: 2,5m / 5m / 10m / 20m . Other lengths on request.

diameter: 11.9 mm

minimum bending radius: 40mm

temperature range for total length: -5°C...+80°C (for temperatures below 0°C use a water-free compressed air source)

Fibre stress: 70kpsi max.

Protection class: IP68 to 6bar

MEASUREMENT HEAD:

optics: synthetic fused silica

housing material: marine grade stainless steel (1.4404), excellent corrosion resistance

temperature range: 0°C...+110°C

weight ca. 1.5 kg

dimensions(sensor head): length: ca. 230 mm (dependent on the Path length)

diameter: 44 mm

Protection class: IP68 to 6bar

Multi - parameter calculation (max. 50)

included parameters on delivery:

SAC

fingerprint F

spectral alarm

obtainable parameters:

biological Oxygen Demand **BOD**

chemical Oxygen Demand **COD**

dissolved Oxygen Compounds **DOC**

nitrates **NO3**

total Organic Carbon **TOC**

total Suspended Solids **TSS**

others on request or take a look on Art. No.: **420 6310**

calibration by comparison analysis, resolution and accuracy

depend on the analytical quality and the water matrix stability

optional accessories:

- 24 V DC, 3.2A Power Supply Item No.: 486 K00X (if spectrometer module is located > 100m from T3 BlueBox)

- available parameter for ISA spectrometer Art. No.: 420 6310-

- PC Software ISA Calc+ Art. No.: 420 6362-

