



UV/VIS SPECTROMETER FOR INSITU ANALYSIS OF WATER

MultiSys:ISA



Features:

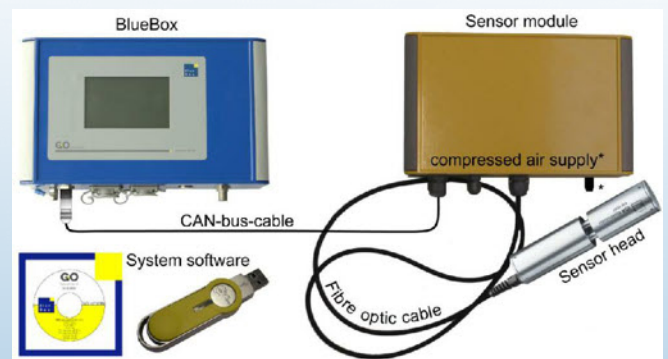
- Multiple and varied sensors into one controller
- Adjustable optical path length
- SS sensor construction
- Integrated air clean function
- No electronics in sensor head
- Touch screen operation
- Open access to calibration software
- More than one substance may be calibrated - Typically: NO₃, COD, SAC, TOC & other specific chemicals

Benefits:

- No Reagents or standard solutions
- Usable in high temperature liquids
- Calibration adjustable by user
- Easy to use and view data
- Data download to PC for manipulation
- Minimised cleaning and maintenance
- Clean or dirty water use

Applications:

- Drinking water QA & Alarm
- Waste water effluent monitoring
- Specific discharge detection by fingerprinting
- Industrial process monitoring & control
- Water & wastewater process control



Hardware items

MultiSys-ISA (In Situ Spectral Analyser) is a spectrometer which works in the wavelength range between 200 and 720 nm (UV-VIS). The result of a single measurement is an absorption spectra over the whole wavelength range. The software processes the spectrum in conjunction with the calibration data to produce values for the parameters or multi parameters programmed.

The ISA sensor is constructed of SS and contains NO electronics, making it particularly suitable for high temperature aggressive environments, as found in the pharmaceutical and food industries.. It also offers an adjustable measuring-path-length thus increasing the number of potential applications.

Sensor fouling is reduced to a minimum by means of the the special surface coating on the optical windows and an integrated air clean system, thus achieving very long in-service times and maintenance intervals.

The Blue Box controller is a powerful interface allowing up to 100 differing sensors to be connected via a CAN bus network. It includes data logging and graphing capability, with access via LAN, wireless LAN and GSM - modem. Optional analogue , digital and control output modules may be attached. Many different parameter sensors may be accommodated as well as the ISA.



SYSTEM SPECIFICATIONS

TRANSMITTER

Display:	Graphic touch panel display 240 x 128 Pixel
Processor:	PC 104, 333Mhz, Op system: Linux, Ram 256MB
Communication:	Lan with RJ 45-plug, Can-connection with cable & M12-Stecker, Male USB - interface
Modem:	GSM, GPRS, UMTS
Software:	BlueBox SQL (BlueBox system software) with the modules AMS, ISA Data and Spectrum Visual. Calibration software provided with every instrument
Inputs:	CAN Bus to sensors & actuators. Modules available for: conductivity, temperature, oxygen, pH, turbidity, Chlorine, pressure, level, and redox
Outputs:	Optional analogue output modules for 2 x 4:20 mA .or 8 off 4-20mA Optional digital output module for 8off relays (230VAC, 4A) Optional 4 off dig in/4 off dig out module
Data Logger:	Industrial compact Flash card - 1GB, 512MB, 128MB
Dimensions:	280 x 170 x 90 mm (w x l x h)
Materials:	Aluminium die cast housing, powder coated
Protection:	IP65 standard
Operating temp:	-10°C TO +50°C storage, 0°C to +40°C operation
Weight:	2.6 Kg
Power supply:	18-36V DC, Typically 0.7A 15W

SENSOR

Operating temp:	-10...+110 °C
Cable length:	fibre optic 2.5 - 10metres max
Dimensions:	230 mm long x 44 mm dia.
Weight:	0.8 Kg
Construction:	SS 1.4539
Light Source	Xenon Flash Light (in interface box)
Frequency of Measurement:	>/= 10 secs
Optical Path Length:	0.5 - 20mm
Waveband:	190 -720 nm
Connection:	Fibre optic to interface box.
Air connection:	4 bar max

INTERFACE BOX

Enclosure:	Alumuminium case Colour: Gold
Dimensions:	280 mm x 170 mm x 90 mm
Protection:	IP65
Weight:	ca. 2 kg;
Temperature range:	0°...+40°C
Supply voltage:	24 V DC

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