

FSA-CT1000

UV COD and Turbidity Liquid Analyser



Optoseven 

Measured Parameters

The analyser measures COD optically by correlation to UV-absorbance at 254 nm. Turbidity is measured at 850 nm by nephelometry scattering.

Operation

Optoseven FSA-CT1000 liquid analyser has a fully automatic operation. It does not need manual cleaning or any other maintenance. The user can set all the operation parameters from the user interface display panel.

Analyser Top 10 Benefits

1. High performance also in harsh conditions
2. Fully automatic operation
3. Reliable results without zero drift
4. Minimal cleaning agent consumption
5. No need for manual cleaning or other manual maintenance
6. Problem self diagnostics
7. Wide measuring range
8. Multipoint sampling
9. Comprehensive user interface
10. Modular design allowing customised modifications

Customisation

The analyser can be tailored to meet the application requirements by using different optical wavelengths or optional measurement modules. With different optical setups, the analyser can measure e.g.

- Nitrate
- Algae
- Aromatics (PAH)

UV absorbance measurement for COD	254 nm, or other freely selectable wavelength
▪ Measuring range	0-300 [1/m], conversion to COD by correlation factor
▪ Repeatability	0.1 [1/m]
Turbidity measurement	850 nm nephelometry scattering
▪ Measuring range	0-1000 [NTU], conversion to TSS by correlation factor
▪ Repeatability	0.05 [NTU]
Zero drift	0, automatically corrected
Measurement interval	Freely set from continuous to 1 point per day, 30 min typical
Optional measurement modules	Absorbance, Fluorescence and Scattering (all with custom wavelengths)
Optional analogue inputs	4-20 mA, 0-10 V
Result outputs	Savings to MMC, Analogue outputs: 4-20 mA with freely adjustable ranges, Field Busses are optional
Operation modes	Auto, Remote and Manual
Sample line max. length	20 m, with option for longer lengths
Sample max. suction height	5 m
Sample flow	< 100 ml/min
Pump life time	> 2 years of normal use
Light source life time	> 10 years of normal use
Operation temperature	5-40 °C
Dimensions (h x w x d)	600 mm x 300 mm x 155 mm
Weight	15 kg
IP-Classification	IP65
Sample wetted parts	PFA teflon, Quarz glass, SS316, Novoprene
Operating voltage	24 VDC
Power consumption	35 W max.
Power source	110-240 VAC, max 1,7 A
Purge media	Water or air
Purge input pressure	2-8 Bar
Cleaning agent	Typically NaOH (5%)
Cleaning agent consumption	~1 l/month, depending the application
Zero Calibration lines	1 pcs
Sample lines	1 pcs (Optional up to 4)
Span Calibration lines	0 pcs (Optional up to 4)

Other components and modifications as well as different external sensors are available on request.