

## nanoFlu

32SXXXXX0



### Miniature fluorometer

nanoFlu fluorometers are low-priced, submersible miniaturized fluorometers for the highly precise, selective measurement of CDOM (coloured dissolved organic matter, yellow substances), chlorophyll a, phycocyanin in cyanobacteria, rhodamine or fluorescein. Long-term stability of measurements is ensured by the combination of low power consumption and innovative coating of the optical window, as an energy efficient and environmentally friendly antifouling solution. The devices can be used in diverse applications for the monitoring of sea and river waters,

as well as in drinking and wastewater treatment systems. Internal reference signals of the high performance LEDs used for fluorescence excitation compensate ageing effects and temperature influences.

The nanoFlu features the new TriOS G2 interface, allowing fast and easy configuration of sensors by using a web browser. Integration into existing process control systems and external data loggers has never been easier.

### Benefits

- High sensitivity
- Nano-coating
- Fast data acquisition
- Electronic light compensation
- Compact size
- Low power consumption
- Low costs

### Applications

- Surface water
- Bathing lakes
- Drinking water production and treatment
- Raw water treatment
- Environmental monitoring

### Accessories

- FlowCell
- SolidCAL

### Parameter list

<b>Parameters</b>	CDOM [ $\mu\text{g/L}$ ] with 0...200 $\mu\text{g/L}$
	or chlorophyll a [ $\mu\text{g/L}$ ] with 0...200 $\mu\text{g/L}$ or 0...500 $\mu\text{g/L}$
	or phycocyanin [ $\mu\text{g/L}$ ] with 0...200 $\mu\text{g/L}$ or 0...500 $\mu\text{g/L}$
	or rhodamine [ $\mu\text{g/L}$ ] with 0...200 $\mu\text{g/L}$
	or fluorescein [ $\mu\text{g/L}$ ] with 0...200 $\mu\text{g/L}$

## Technical Specifications

<b>Measurement technology</b>	Light source	LED
	Detector	Photodiode
<b>Measurement principle</b>		Fluorescence
<b>Parameters</b>		see parameter list
<b>Measurement range</b>		0...200 µg/L or 0...500 µg/L
<b>Measurement accuracy</b>		± 5 %
<b>Turbidity compensation</b>		no
<b>Data logger</b>		no
<b>Reaction time T100</b>		6 s
<b>Measurement interval</b>		3 s
<b>Housing material</b>		Stainless steel (1.4571/1.4404) or titanium (3.7035) or POM
<b>Dimensions (L x Ø)</b>		171 mm x 36 mm
<b>Weight</b>	stainless steel	0,5 kg
	titanium	0,4 kg
	POM	0,27 kg
<b>Interface</b>	digital	Ethernet (TCP/IP)
		RS-232 or RS-485 (Modbus RTU)
<b>Power consumption</b>	typical	< 1 W
	with network	< 1.6 W
<b>Power supply</b>		12...24 VDC (± 10 %)
<b>Required supervision</b>		typically ≤ 0,5 hours per month
<b>Calibration/maintenance interval</b>		24 months
<b>System compatibility</b>		Modbus RTU
<b>Warranty</b>		1 year (EU: 2 years)

## INSTALLATION

<b>Max. pressure</b>	with Subconn	30 bars
	with fixed cable	3 bars
	in flow cell	1 bar, 2...4 L/min
<b>Protection type</b>		IP68
<b>Sample temperature</b>		+2...+40 °C
<b>Ambient temperature</b>		+2...+40 °C
<b>Storage temperature</b>		-20...+80 °C
<b>Inflow velocity</b>		max. 10 m/s