

## nanoFlu

32SXXXXX0



### Miniature fluorometer

nanoFlu fluorometers are low-priced, submersible miniaturized fluorometers for highly precise and selective measurement of CDOM (colored dissolved organic matter, yellow substances), chlorophyll a or phycocyanin in cyanobacteria. 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 environ-

mentally friendly anti-fouling 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 aging effects and temperature influences.

### Benefits

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

### Applications

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

### Parameter list

<b>Parameter</b>	CDOM [ $\mu\text{g/L}$ ]
	or chlorophyll a [ $\mu\text{g/L}$ ]
	or phycocyanin [ $\mu\text{g/L}$ ]
	or rhodamine [ $\mu\text{g/L}$ ]
	or fluorescein [ $\mu\text{g/L}$ ]

## Technical Specifications

<b>Measurement technology</b>	light source	LED
	detector	Photo diodes
<b>Measurement principle</b>		Fluorescence
<b>Parameter</b>		See parameter list p. 30
<b>Measuring range</b>		0...200 µg/L 0 to 200 ppb
<b>Measurement accuracy</b>		± 5 %
<b>Turbidity compensation</b>		No
<b>Data logger</b>		No
<b>T100 response time</b>		6 s
<b>Measurement interval</b>		3 s
<b>Housing material</b>		Stainless steel (1.4571/1.4404) or titanium (3.7035)
<b>Dimensions (L x Ø)</b>		171 mm x 36 mm ~ 6.7" x 1.4"
<b>Weight</b>	stainless steel	0.5 kg ~ 1.1 lbs
	titanium	0.4 kg ~ 0.9 lbs
<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>Maintenance effort</b>		≤ 0.5 h/month (typical)
<b>Calibration/maintenance interval</b>		24 months
<b>System compatibility</b>		Modbus RTU
<b>Guarantee</b>		1 year (EU: 2 years) US: 2 years
<b>INSTALLATION</b>		
<b>Max. pressure</b>	with SubConn	30 bar ~ 435 psig
	with fixed cable	3 bar ~ 43.5 psig
	in FlowCell	1 bar, 2...4 L/min ~ 14.5 psig, 0.5 to 1 gpm
<b>Protection type</b>		IP68 NEMA 6P
<b>Sample temperature</b>		+2...+40 °C ~ +36 °F to +104 °F
<b>Ambient temperature</b>		+2...+40 °C ~ +36 °F to +104 °F
<b>Storage temperature</b>		-20...+80 °C ~ -4 °F to +176 °F
<b>Inflow velocity</b>		0.1...10 m/s ~ 0.33 fps to 33 fps