



SENSORS &  
CONTROLLERS



ANALYZERS  
& SAMPLERS



LEVEL, FLOW  
& PRESSURE



WEB APP &  
DATALOGGING



ACCESSORIES

# S480 UV NO<sub>3</sub> DATASHEET

## UV SENSOR



### MAIN FEATURES

Low-cost UV photometer for nitrate determination.

The four detection channels enable precise optical determination of nitrate by absorption, taking into account turbidity and organic substances that are a problem for many products currently on the market.

An internal temperature correction also increases the stability of the measured value, the S480UV NO<sub>3</sub> includes much more advanced features than comparable devices on the market.

- Proven UV-absorption method
- Without sampling and preparation of test samples
- Real-time sensor
- Without reagents
- Optical window with nano coating

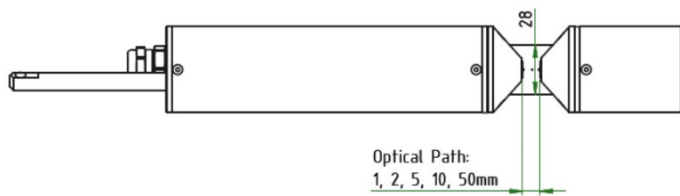
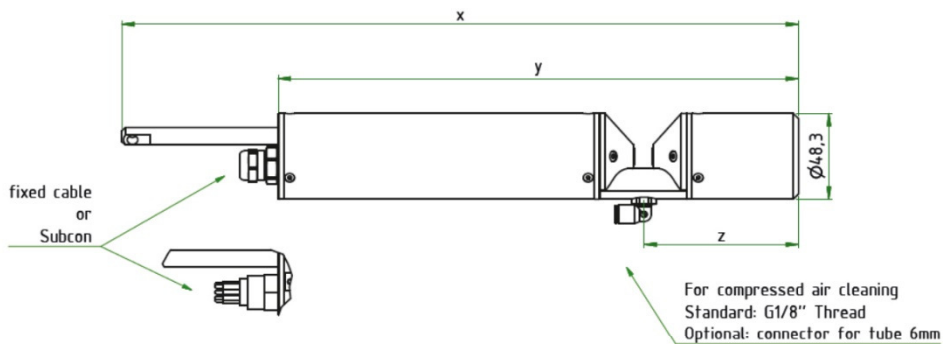
### APPLICATIONS

- Sewage treatment plants
- Environmental monitoring
- Drinking water

## TECHNICAL DATA

Housing material	Stainless steel (1.4571/1.4404) or titanium (3.7035)
Measurement technology	Xenon flash lamp Detector: 4 photo diodes + filter
Measurement principle	Attenuation,
Optical path	mm 0,3/1/2/5/10/50
Parameters	NO <sub>3</sub> -N, NO <sub>3</sub> , NO <sub>x</sub> -N, NO <sub>x</sub> (calibrated with NO <sub>3</sub> standard solution)
Measurement range	1 mm path: 0.5...60 mg/L NO <sub>3</sub> -N 10 mm path: 0.05...6 mg/L NO <sub>3</sub> -N
Accuracy	± (5 % + 0.1 mg/L NO <sub>3</sub> -N) with 10 mm path ± (5 % + 1 mg/L NO <sub>3</sub> -N) with 1 mm path
Turbidity compensation	Yes
Reaction time T100	20 s
Power consumption	≤ 7 W
Power supply	12...24 VDC (± 10 %)
Interface	RS-485 (Modbus RTU)
Required supervision	≤ 0.5 h/month (typical)
Pressure/flow	3 Bar max – In flow cell 1 bar, 2...4 L/min
Protection type	IP68
Sample temperature	+2...+40 °C
Ambient temperature	+2...+40 °C
Storage temperature	-20...+80 °C
Inflow velocity	0,1...10 m/s

## DIMENSIONS



product table			
name	x [mm]	y [mm]	z [mm]
S480 UV 10	381	293	87
S480 UV 50	421	333	107

## ORDER CODES

9730950057	S480UV/NO3 Nitrate Sensor o.p. 1mm NO3 10m cable
9730951057	S480UV/NO3 Nitrate Sensor o.p. 5mm NO3 10m cable
9730952057	S480UV/NO3 Nitrate Sensor o.p. 2mm NO3 10m cable
9730953057	S480UV/NO3 Nitrate Sensor o.p. 0,3mm NO3 10m cable
9730954057	S480UV/NO3 Nitrate Sensor o.p. 10mm NO3 10m cable
9730955057	S480UV/NO3 Nitrate Sensor o.p. 50mm NO3 10m cable