



# 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

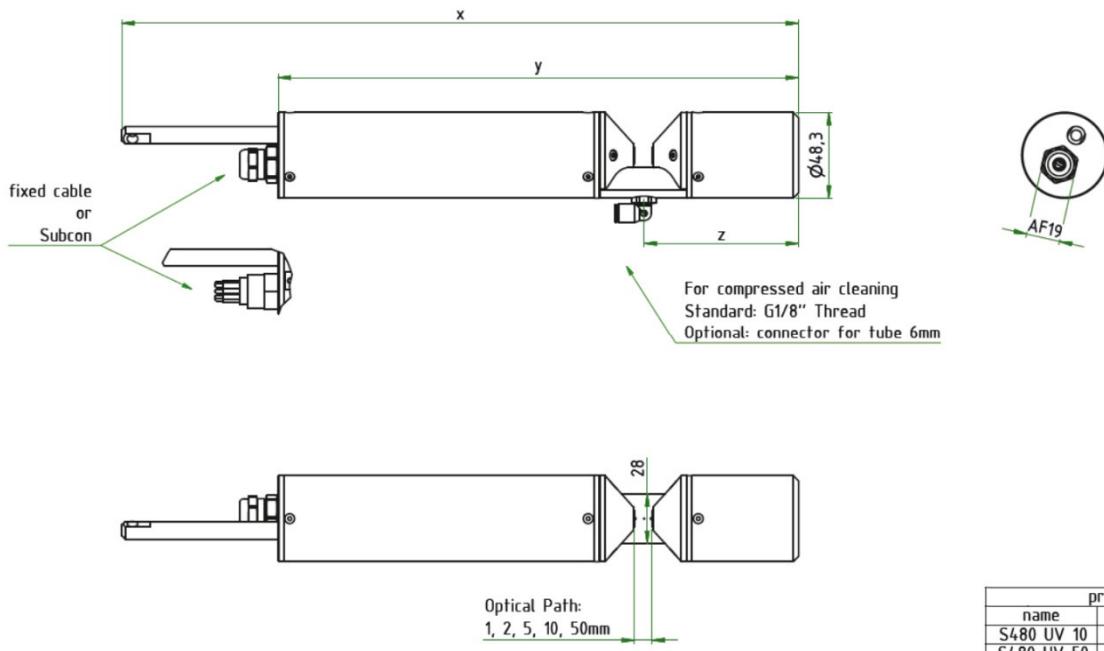
- Sewage treatment plants
- Environmental monitoring
- Drinking water



## TECHNICAL DATA

|                        |   |
|------------------------|---|
| Housing material       | Stainless steel (1.4571/1.4404) or titanium (3.7035)  |
| Measurement technology | Xenon flash lamp<br>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> , NOx-N, NOx (calibrated with NO <sub>3</sub> standard solution)        |
| Measurement range      | 1 mm path: 0.5...60 mg/L NO <sub>3</sub> -N<br>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<br>± (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  |