

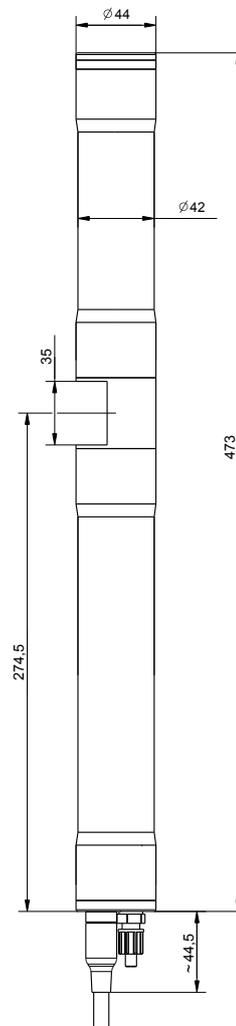
# nitro::lyser™ II - V3

nitro::lyser™ II monitors 2 of the following parameters: Turbidity, NO<sub>3</sub>-N and NO<sub>3</sub>

- measuring principle: UV-Vis spectrometry over the total range (190-750 nm)
- web server on board - IoT enabled, no user software is needed to configure the probe
- communicates directly with your mobile device via WLAN
- 8 GB onboard memory - capacity for logging data for many years
- improved optical performance - revolutionary precision
- fast measurement interval - every 30 seconds possible
- extremely power efficient - sleep mode for low energy consumption
- multiparameter probe with 1 mm, 5 mm or 35 mm optical path length, ideal for waste water, surface water and drinking water
- long term stable and maintenance free in operation
- factory precalibrated, local multi-point calibration possible
- automatic cleaning with compressed air or brush

## recommended accessories

| part number    | article name   |
|----------------|--|
| D-330-xxx      | con::cube V3   |
| D-320-pro2-230 | con::lyte pro  |
| B-33-012       | con::nect V3   |
| B-32-xxx       | s::can compressor  |
| B-44           | cleaning valve   |
| B-44-2         |  |
| C-32-V3        | Adapter cable to connect a V3 spectrometer (M12) to V2 Terminal (MIL Plug) |
| F-110-V3       | carrier s::can spectrometer V3 & V2 probe, 45°                             |
| F-120-V3       | carrier s::can spectrometer V3 & V2 probe, vertical attachment             |
| F-446-V3       | flow cell AutoBrush, POM-C (for spectrometer V3 & V2 pathlength 35 mm)     |
| S-11-xx-moni   | moni::tool Software  |
| F-146-rs-x     | ruck::sack (submersible Autobrush)   |



### technical specification

|  |   |  |  |
|--|---|--|--|
| measuring principle                        | UV-Vis spectrometry 200 - 750 nm  | cable length                           | 1 m fixed cable (-010) or<br>7.5 m fixed cable (-075) or<br>15 m fixed cable (-150)  |
| measurement interval                       | 30 sec (configurable, depending on application)   | cable type                             | PU jacket  |
| automatic compensation cross sensitivities | turbidity / solids / organic substances   | housing material                       | stainless steel 1.4404 (optional titanium)   |
| precalibrated ex-works                     | all parameters  | window material                        | optical path length 5 and 1 mm:<br>sapphire<br>optical path length 35 mm:<br>fused silica (UV-grade)   |
| accuracy standard solution (>1 mg/l)       | NO <sub>3</sub> -N: +/- 3% +1/OPL[mg/l]*<br>COD-KHP: +/-3% +10/OPL[mg/l]*<br>(* OPL ... optical pathlength in mm) | weight (min.)                          | 3.4 kg (incl. cable)   |
| access to raw signals                      | no  | dimensions (Ø x l)                     | optical path length 35 mm:<br>44 x 473 mm / 517.5 mm<br>optical path length 5 mm:<br>44 x 457 mm / 501.5 mm<br>optical path length 1 mm:<br>44 x 453 mm / 497.5 mm |
| reference standard                         | distilled water   | operating temperature                  | 0 ... 50 °C  |
| onboard memory                             | 8 GB  | operating pressure                     | 0 ... 5 bar  |
| integrated temperature sensor              | 0 ... 45 °C   | high pressure specification (optional) | 10 bar   |
| resolution temperature sensor              | 0.1 °C  | installation / mounting                | submersed or in a flow cell  |
| integration via                            | con::cube V3<br>con::nect V3<br>con::lyte V5 (D-320-pro2) and adapter cable (C-32-V3)                             | flow velocity                          | 3 m/s (max.)   |
| power supply                               | 10 ... 18 VDC   | mechanical stability                   | 30 Nm  |
| power consumption (typical)                | 3 W   | ingress protection class               | IP68   |
| power consumption (sleep model)            | 60 mW   | automatic cleaning                     | media: compressed air or autobrush<br>permissible pressure: 3 ... 6 bar  |
| power consumption (max.)                   | 20 W  | storage temperature                    | -10 ... 65 °C  |
| interface to s::can terminals              | M12 RSTS 8Y (IP67), RS485, Ethernet   | conformity - environmental testing     | EN 60721-3   |
| interface to third party terminals         | con::nect V3 incl. Modbus RTU, REST API, Modbus TCP/IP  | conformity - EMC                       | EN 61326-1   |
| digital interface (for cleaning devices)   | 1 digital in/out<br>1 digital out   | conformity - RoHS 2                    | EN 50581   |
| internal sensors                           | supply voltage sensor, tilt sensor, rotation sensor   | standard guarantee                     | 1 years  |
| status information                         | RGB LED ring  | extended guarantee (optional)          | 3 years  |

### surface water

|  |      | parameter           |                           |                        |                   |
|--|------|---------------------|---------------------------|------------------------|-------------------|
|  |      | turbidity [NTU/FTU] | NO <sub>3</sub> -N [mg/l] | NO <sub>3</sub> [mg/l] | part number       |
| nitro::lyser™ II<br>(2 parameters, 5 mm OPL) | min. | 0                   | 0                         | 0                      | G3-N2-R-05-NO-xxx |
|  | max. | 1400                | 100                       | 460                    |                   |

### ground water

|   |      | parameter           |                           |                        |                   |
|---|------|---------------------|---------------------------|------------------------|-------------------|
|   |      | turbidity [NTU/FTU] | NO <sub>3</sub> -N [mg/l] | NO <sub>3</sub> [mg/l] | part number       |
| nitro::lyser™ II<br>(2 parameters, 35 mm OPL) | min. | 0                   | 0                         | 0                      | G3-N2-G-35-NO-xxx |
|   | max. | 170                 | 20                        | 88                     |                   |

### drinking water

|   |      | parameter           |                           |                        |                   |
|---|------|---------------------|---------------------------|------------------------|-------------------|
|   |      | turbidity [NTU/FTU] | NO <sub>3</sub> -N [mg/l] | NO <sub>3</sub> [mg/l] | part number       |
| nitro::lyser™ II<br>(2 parameters, 35 mm OPL) | min. | 0                   | 0                         | 0                      | G3-N2-D-35-NO-xxx |
|   | max. | 170                 | 20                        | 88                     |                   |