

# spectro::lyser™ titanium pro

spectro::lyser™ titanium pro monitors depending on the application an individual selection of: TSS, turbidity, NO<sub>3</sub>-N, COD, BOD, TOC, DOC, UV254, NO<sub>2</sub>-N, color, BTX, O<sub>3</sub>, HS-, AOC, fingerprints,spectral alarms and temperature

- s::can plug & measure
- measuring principle: UV-Vis spectrometry over the total range (190-750 nm)
- ideal for industrial waste water, desalination and sea water
- rugged design with titanium grade 2 housing
- factory precalibrated, with advanced calibration service included
- long term stable and maintenance free in operation
- automatic cleaning with compressed air or brush
- mounting and measurement directly in the media (InSitu) or in a flow cell (monitoring station)
- multiparameter probe with adjustable open path length
- adaption of optical path lengths to 35 mm, 5 mm, 2 mm or 0.5 mm possible
- easy mounting without clogging



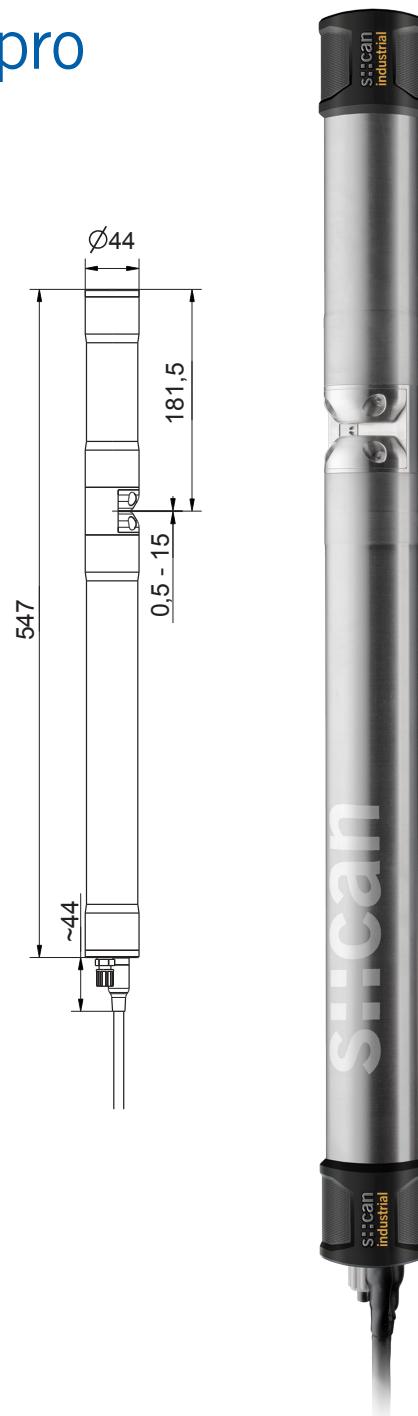
up to 10 bar  
operating pressure



up to 50 °C  
operating temperature



highly resistant  
titanium grade 2



| recommended accessories |   |
|-------------------------|---|
| part number             | article name  |
| D-330-xxx               | con::cube V3  |
| B-32-xxx                | s::can compressor   |
| B-44                    | cleaning valve  |
| B-44-2                  |   |
| F-120-V3                | carrier s::can spectrometer V3 & V2 probe, vertical attachment        |
| F-48-V3                 | spectrometer V3 & V2 flow-cell (bypass setup), PVC                    |
| S-11-xx-moni            | moni::tool Software   |
| C-32-MIL                | Adapter cable to connect a V2 spectrometer (MIL) to V3 Terminal (M12) |

**technical specification**

|  |   |                                    |   |
|--|---|------------------------------------|---|
| measuring principle                        | UV-Vis spectrometry 190 - 750 nm<br>UV spectrometry 190 - 390 nm  | interface to third party terminals | con::nect incl. gateway modbusRTU                     |
| measuring principle detail                 | xenon flash lamp, 256 photo diodes  | cable length                       | 7.5 m fixed cable (-075) or<br>1 m fixed cable (-010) |
| automatic compensation instrument          | two beam measurement, complete spectrum   | cable type                         | PU jacket   |
| automatic compensation cross sensitivities | turbidity / solids / organic substances   | housing material                   | titanium grade 2 (3.7035)                             |
| precalibrated ex-works                     | all parameters  | window material                    | optical path length 5 ... 0.5 mm:<br>sapphire         |
| accuracy standard solution (>1 mg/l)       | NO <sub>3</sub> -N: +/- 2% +1/OPL[mg/l]*<br>COD-KHP: +/-2% +10/OPL[mg/l]*<br>(* OPL ... optical pathlength in mm) | weight (min.)                      | optical path length 35 mm:<br>fused silica (UV-grade) |
| access to raw signals                      | access to spectral information  | dimensions (Ø x l)                 | 2.8 kg (incl. cable)                                  |
| reference standard                         | distilled water   | operating temperature              | 44 mm x 547 mm / 591 mm                               |
| onboard memory                             | 656 KB  | operating pressure                 | 0 ... 50 °C   |
| integrated temperature sensor              | -10 ... 50 °C   | installation / mounting            | 0 ... 10 bar  |
| resolution temperature sensor              | 0.1 °C  | flow velocity                      | submersed or in a flow cell                           |
| integration via                            | con::cube<br>con::lyte<br>con::nect   | mechanical stability               | 3 m/s (max.)  |
| power supply                               | 11 ... 15 VDC   | ingress protection class           | 30 Nm   |
| power consumption (typical)                | 4.2 W   | automatic cleaning                 | IP68  |
| power consumption (max.)                   | 20 W  | storage temperature                | media: compressed air or autobrush                    |
| interface to s::can terminals              | MIL connector, RS485  | conformity - EMC                   | -10 ... 50 °C   |
|  |   | conformity - safety                | EN 61326-1, EN 61326-2-3                              |
|  |   | standard warranty                  | EN 61010-1  |
|  |   | extended warranty (optional)       | 2 years   |
|  |   |                                    | 3 years   |

**paper mill WWTP effluent**

|  | parameter  |            |              |                           |               |                 |                             |                               |
|--|------------|------------|--------------|---------------------------|---------------|-----------------|-----------------------------|-------------------------------|
|  | TSS [mg/l] | COD [mg/l] | COD f [mg/l] | NO <sub>3</sub> -N [mg/l] | UV254 [Abs/m] | UV254 f [Abs/m] | part number                 |                               |
| spectro::lyser™ UV-Vis<br>(TSS, NO <sub>3</sub> -N, COD, CODf,<br>UV254, UV254f) | min.       | 0          | 0            | 0                         | 0             | 0               | SP-1-002-p0-s-TI-010 / -075 | (incl. Global Calibration q1) |
|  | max.       | 1000       | 350          | 350                       | 10            | 1250            | 1000                        |                               |

**brewery WWTP influent**

|   | parameter  |            |               |                 |                             |  |  |                               |
|---|------------|------------|---------------|-----------------|-----------------------------|--|--|-------------------------------|
|   | TSS [mg/l] | COD [mg/l] | UV254 [Abs/m] | UV254 f [Abs/m] | part number                 |  |  |                               |
| spectro::lyser™ UV-Vis<br>(TSS, COD, UV254, UV254f) | min.       | 0          | 0             | 0               | SP-1-002-p0-s-TI-010 / -075 |  |  |                               |
|   | max.       | 5000       | 45000         | 1250            | 1000                        |  |  | (incl. Global Calibration b1) |

**dairy WWTP influent**

|  | parameter  |            |              |                           |               |                 |                             |                               |
|--|------------|------------|--------------|---------------------------|---------------|-----------------|-----------------------------|-------------------------------|
|  | TSS [mg/l] | COD [mg/l] | COD f [mg/l] | NO <sub>3</sub> -N [mg/l] | UV254 [Abs/m] | UV254 f [Abs/m] | part number                 |                               |
| spectro::lyser™ UV-Vis<br>(TSS, NO <sub>3</sub> -N, COD, CODf,<br>UV254, UV254f) | min.       | 0          | 0            | 0                         | 0             | 0               | SP-1-500-p0-s-TI-010 / -075 |                               |
|  | max.       | 6000       | 12500        | 6000                      | 80            | 2500            | 2000                        | (incl. Global Calibration m1) |