

# 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



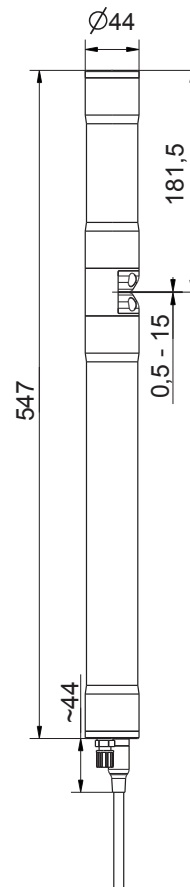
up to 10 bar  
operating pressure



up to 50 °C  
operating temperature



highly resistant  
titanium grade 2



## recommended accessories

| part number  | article name   |
|--------------|--|
| B-32-xxx     | s::can compressor  |
| B-44         | cleaning valve   |
| B-44-2       |  |
| D-315-xxx    | con::cube  |
| 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  |

**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<br>optical path length 35 mm:<br>fused silica (UV-grade) |
| 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.)                      | 2.8 kg (incl. cable)   |
| access to raw signals                      | access to spectral information  | dimensions (Ø x l)                 | 44 mm x 547 mm / 591 mm  |
| reference standard                         | distilled water   | operating temperature              | 0 ... 50 °C  |
| onboard memory                             | 656 KB  | operating pressure                 | 0 ... 10 bar   |
| integrated temperature sensor              | -10 ... 50 °C   | installation / mounting            | submersed or in a flow cell  |
| resolution temperature sensor              | 0.1 °C  | flow velocity                      | 3 m/s (max.)   |
| integration via                            | con::cube<br>con::lyte<br>con::nect   | mechanical stability               | 30 Nm  |
| power supply                               | 11 ... 15 VDC   | ingress protection class           | IP68   |
| power consumption (typical)                | 4.2 W   | automatic cleaning                 | media: compressed air or autobrush   |
| power consumption (max.)                   | 20 W  | storage temperature                | -10 ... 50 °C  |
| interface to s::can terminals              | MIL connector, RS485  | conformity - EMC                   | EN 61326-1, EN 61326-2-3   |
|  |   | conformity - safety                | EN 61010-1   |
|  |   | standard warranty                  | 2 years  |
|  |   | extended warranty (optional)       | 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 (TSS, NO <sub>3</sub> -N, COD, CODf, UV254, UV254f) | min. | 0          | 0          | 0            | 0                         | 0             | 0               | SP-1-002-p0-s-TI-010 / -075<br>(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 (TSS, COD, UV254, UV254f) | min. | 0          | 0          | 0             | 0               | SP-1-002-p0-s-TI-010 / -075<br>(incl. Global Calibration b1) |
|  | max. | 5000       | 45000      | 1250          | 1000            |  |

**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 (TSS, NO <sub>3</sub> -N, COD, CODf, UV254, UV254f) | min. | 0          | 0          | 0            | 0                         | 0             | 0               | SP-1-500-p0-s-TI-010 / -075<br>(incl. Global Calibration m1) |
|  | max. | 6000       | 12500      | 6000         | 80                        | 2500          | 2000            |  |