

spectro::lyser™ titanium pro

spectro::lyser™ monitors depending on the application an individual selection of: TSS, turbidity, NO₃-N, COD, BOD, TOC, DOC, UV254, NO₂-N, color, BTX, O₃, HS-, AOC, fingerprints and spectral alarms, temperature and pressure

- s::can plug & measure
- measuring principle: UV-Vis spectrometry over the total range (190-720 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
A-500-ti	Inserts for optical pathlength 0.5 mm, titanium, sapphire
A-002-ti	Inserts for optical pathlength 2 mm, titanium, sapphire
A-005-ti	Inserts for optical pathlength 5 mm, titanium, sapphire
D-315-xxx	con::cube
S-11-xx-moni	moni::tool Software
F-120-spectro	carrier s::can™ spectrometer probe
F-48-spectro	s::can spectrometer flow-cell (by-pass setup), PVC



technical specification

measuring principle	UV-Vis spectrometry 190 - 750 nm 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 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
precalibrated ex-works	all parameters	window material	optical path length 5 ... 0.5 mm: sapphire optical path length 35 mm: fused silica (UV-grade)
accuracy standard solution (>1 mg/l)	NO ₃ -N: +/- 2% +1/OPL[mg/l]* COD-KHP: +/-2% +10/OPL[mg/l]* (* OPL ... optical pathlength in mm)	weight (min.)	2.8 kg (incl. cable)
access to raw signals	access to spectral information	dimensions (Ø x l)	optical path length 35 ... 0.5 mm: 44 x 547 mm / 591 mm
reference standard	distilled water	operating temperature	0 ... 50 °C
onboard memory	656 KB	storage temperature	-10 ... 55 °C
integrated temperature sensor	-10 ... 50 °C	storage humidity	5 ... 90 % (non condensing)
resolution temperature sensor	0.1 °C	operating pressure	0 ... 10 bar
resolution pressure sensor	1:1000 of measuring range	installation / mounting	submersed or in a flow cell
integration via	con::cube con::lyte con::nect	flow velocity	3 m/s (max.)
power supply	11 ... 15 VDC	mechanical stability	30 Nm
power consumption (typical)	4.2 W	ingress protection class	IP68
power consumption (max.)	20 W	automatic cleaning	compressed air or automatic brush
interface to s::can terminals	MIL connector (IP68), RS485	conformity - EMC	EN 61326-1, EN 61326-2-3
		warranty standard	2 years
		extended warranty (optional)	3 years

paper mill WWTP effluent

		concentration ranges and sensor/probe type for this application						part number
		TSS [mg/l]	NO ₃ -N [mg/l]	COD [mg/l]	COD f [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	
spectro::lyser™ UV-Vis (TSS, NO ₃ -N, COD, CODf, UV254, UV254f)	min.	0	0	0	0	0	0	SP-1-002-p0-TI-010 / -075 (incl. Global Calibration q1)
	max.	1000	10	350	350	1250	1000	

brewery WWTP influent

		concentration ranges and sensor/probe type for this application				part number
		TSS [mg/l]	COD [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	
spectro::lyser™ UV-Vis (TSS, COD, UV254, UV254f)	min.	0	0	0	0	SP-1-002-p0-TI-010 / -075 (incl. Global Calibration b1)
	max.	5000	45000	1250	1000	

dairy WWTP influent

		concentration ranges and sensor/probe type for this application						part number
		TSS [mg/l]	NO ₃ -N [mg/l]	COD [mg/l]	COD f [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	
spectro::lyser™ UV-Vis (TSS, NO ₃ -N, COD, CODf, UV254, UV254f)	min.	0	0	0	0	0	0	SP-1-500-p0-TI-010 / -075 (incl. Global Calibration m1)
	max.	6000	80	12500	6000	2500	2000	

paper mill WWTP influent

		concentration ranges and sensor/probe type for this application					part number
		TSS [mg/l]	COD [mg/l]	COD f [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	
spectro::lyser™ UV-Vis (TSS, COD, CODf, UV254, UV254f)	min.	0	0	0	0	0	SP-1-002-p0-TI-010 / -075 (incl. Global Calibration p1)
	max.	3000	5000	4250	1250	1000	