

spectro::lyser™ industrial

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 and sewer applications
- explosion proof specification according to RL 2014/34/EU, TÜV-A16 ATEX
- 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, 15 mm, 5 mm, 2 mm, 1 mm or 0.5 mm possible
- easy mounting without clogging



**up to 10 bar
operating pressure**



**explosion proof
specification**



**advanced calibration
service**

recommended accessories

part number	article name
A-500-s	Inserts for optical pathlength 0.5 mm, sapphire
A-002-s	Inserts for optical pathlength 2 mm, sapphire
A-005-s	Inserts for optical pathlength 5 mm, 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	cable length	7.5 m fixed cable (-075) or 1 m fixed cable (-010)
measuring principle detail	xenon flash lamp, 256 photo diodes	cable type	PU jacket
automatic compensation instrument	two beam measurement, complete spectrum	housing material	stainless steel 1.4404
automatic compensation cross sensitivities	turbidity / solids / organic substances	window material	optical path length 15 ... 0.5 mm: sapphire optional: optical path length 35 ... 5 mm: fused silica (UV-grade)
precalibrated ex-works	all parameters	weight (min.)	3.4 kg (incl. cable)
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)	dimensions (Ø x l)	optical path length 35 ... 0.5 mm: 44 x 547 mm / 591 mm
access to raw signals	access to spectral information	operating temperature	0 ... 45 °C
reference standard	distilled water	storage temperature	-10 ... 50 °C
onboard memory	656 KB	storage humidity	5 ... 90 % (non condensing)
integrated temperature sensor	-10 ... 50 °C	operating pressure	0 ... 10 bar
resolution temperature sensor	0.1 °C	explosion proof specification	RL 2014/34/EU, TÜV-A16 ATEX 3001Q
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	ingress protection class	IP68
power consumption (typical)	4.2 W	automatic cleaning	compressed air or automatic brush
power consumption (max.)	20 W	conformity - EMC	EN 61326-1, EN 61326-2-3
interface to s:can terminals	MIL connector (IP68), RS485	warranty standard	2 years
interface to third party terminals	con::nect incl. gateway modbusRTU	extended warranty (optional)	3 years

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-sEX-010 / -075 (incl. Global Calibration p1)
	max.	3000	5000	4250	1250	1000	

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-sEX-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-sEX-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-sEX-010 / -075 (incl. Global Calibration m1)
	max.	6000	80	12500	6000	2500	2000	

municipal sewer

		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]	BOD [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	HS [mg/l]	
spectro::lyser™ UV-Vis (TSS, NO ₃ -N, COD, BOD, UV254, UV254f)	min.	0	0	0	0	0	0	0	0	SP-1-002-p0-sEX-010 / -075 (incl. Global Calibration i3)
	max.	3000	40	3750	2000	1250	1000			
spectro::lyser™ UV-Vis (TSS, NO ₃ -N, COD, CODf, UV254, UV254f)	min.	0	0	0	0	0	0	0	0	SP-1-002-p0-sEX-010 / -075 (incl. Global Calibration i1)
	max.	3000	40	3750	1250	1250	1000			
spectro::lyser™ UV-Vis (TSS, NO ₃ -N, COD, HS-, UV254, UV254f)	min.	0	0	0	0	0	0	0	0	SP-1-002-p0-sEX-010 / -075 (incl. Global Calibration i5)
	max.	3000	40	3750		1250	1000	25		