

spectro::lyser™

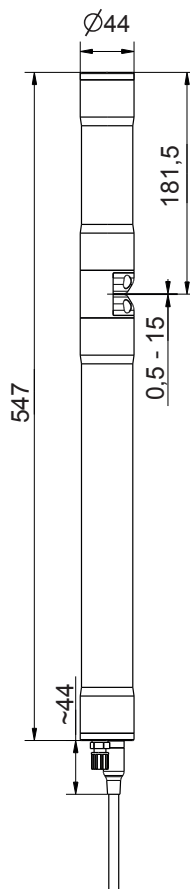
spectro::lyser™ UV monitors depending on the application an individual selection of: TSS (est), turbidity (est) NO₃-N, COD, BOD, TOC, UV254, NO₂-N, BTX, fingerprints and spectral alarms, temperature and pressure

spectro::lyser™ UV-Vis monitors depending on the application an individual selection of TSS, turbidity, NO₃-N, COD, BOD, TOC, DOC, UV254, 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)
- multiparameter probe with adjustable open path length
- ideal for surface water, ground water, drinking water and waste water
- long term stable and maintenance free in operation
- factory precalibrated, local multi-point calibration possible
- automatic cleaning with compressed air or brush
- mounting and measurement directly in the media (InSitu) or in a flow cell (monitoring station)
- operation via s::can terminals & s::can software
- cleaning integrated
- adaption of optical path lengths to 5 mm, 2 mm, 1 mm or 0.5 mm possible
- easy mounting without clogging

recommended accessories

part number	article name
A-500-s	Inserts for optical pathlength 0.5 mm, stainless steel
A-001-s	Inserts for optical pathlength 1 mm, stainless steel
A-002-s	Inserts for optical pathlength 2 mm, stainless steel
A-005-s	Inserts for optical pathlength 5 mm, stainless steel
A-015-s	Inserts for optical pathlength 15 mm, stainless steel
B-32-xxx	s::can compressor
B-44	cleaning valve
B-44-2	
D-315-xxx	con::cube
F-120-spectro	carrier s::can™ spectrometer probe
F-48-spectro	s::can spectrometer flow-cell (by-pass setup), PVC
S-11-xx-moni	moni::tool Software



technical specification

measuring principle	UV-Vis spectrometry 190 - 720 nm UV spectrometry 190 - 390 nm
measuring principle detail	xenon flash lamp, 256 photo diodes
automatic compensation instrument	two beam measurement, complete spectrum
automatic compensation cross sensitivities	turbidity / solids / organic substances
precalibrated ex-works	all parameters
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)
access to raw signals	access to spectral information
reference standard	distilled water
onboard memory	656 KB
integrated temperature sensor	-10 ... 50 °C
resolution temperature sensor	0.1 °C
integrated pressure sensor (optional)	0 ... 1,2/2/11 bar
resolution pressure sensor	1:1000 of measuring range
integration via	con::nect con::lyte con::cube
power supply	11 ... 15 VDC
power consumption (typical)	4.2 W
power consumption (max.)	20 W
interface to s::can terminals	MIL connector (IP67), RS485
interface to third party terminals	con::nect incl. gateway modbusRTU
cable length	7.5 m fixed cable (-075) or 1 m fixed cable (-010)
cable type	PU jacket
housing material	stainless steel 1.4404

window material	optical path length 15 ... 0.5 mm: sapphire optional: optical path length 100 ... 5 mm: fused silica (UV-grade)
weight (min.)	3.4 kg (incl. cable)
dimensions (Ø x l)	optical path length 100 mm: 44 x 612 mm / 656 mm optical path length 35 ... 0.5 mm: 44 x 547 mm / 591 mm
operating temperature	0 ... 45 °C
storage temperature	-10 ... 50 °C
operating pressure	0 ... 3 bar
high pressure specification	10 bar
explosion proof specification (optional)	ATEX according to EN60079-0
installation / mounting	submersed or in a flow cell
flow velocity	3 m/s (max.)
mechanical stability	30 Nm
ingress protection class	IP68
automatic cleaning	media: compressed air permissible pressure: 3 ... 6 bar air volume: 7 ... 20 l per cleaning duration: 1 ... 5 sec. per cleaning cleaning interval: every 1st to 10th measuring interval delay: 10 ... 30 sec.
conformity - EMC	EN 61326-1, EN 61326-2-3
conformity - safety	EN 61010-1
extended warranty (optional)	3 years



municipal WWTP aeration

		concentration ranges and sensor/probe type for this application							
		TSS [mg/l]	TSS est [mg/l]	NO ₃ -N [mg/l]	NO ₂ -N [mg/l]	COD f [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	part number
spectro::lyser™ UV (TSS est, NO ₃ -N, CODf, UV254, NO ₂ -N)	min.		0	0	0	0	0		Sp2-001-p0-sNO-010 / -075 (incl. Global Calibration l2)
	max.		6000	100	500	1200	2500		
spectro::lyser™ UV-Vis (TSS, NO ₃ -N, CODf, UV254, UV254f)	min.	0		0		0	0	0	Sp1-001-p0-sNO-010 / -075 (incl. Global Calibration l1)
	max.	15000		100		1200	2500	2000	

municipal WWTP effluent

		concentration ranges and sensor/probe type for this application								
		TSS [mg/l]	TSS est [mg/l]	NO ₃ -N [mg/l]	NO ₂ -N [mg/l]	COD [mg/l]	COD f [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	part number
spectro::lyser™ UV (TSS est, NO ₃ -N, COD, UV254, NO ₂)	min.		0	0	0	0		0		Sp2-005-p0-sNO-010 / -075 (incl. Global Calibration e2)
	max.		300	45	20	500		500		
spectro::lyser™ UV-Vis (TSS, NO ₃ -N, COD, CODf, UV254, UV254f)	min.	0		0		0	0	0	0	Sp1-005-p0-sNO-010 / -075 (incl. Global Calibration e1)
	max.	600		45		500	300	500	400	

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	Sp1-002-p0-sNO-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	Sp1-002-p0-sNO-010 / -075 (incl. Global Calibration b1)	
	max.	5000	45000	1250	1000		

municipal WWTP influent & sewer

		concentration ranges and sensor/probe type for this application								
		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]	part number
spectro::lyser™ UV-Vis (TSS, NO ₃ -N, COD, BOD, UV254, UV254f)	min.	0	0	0	0	0	0	0		Sp1-002-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		Sp1-002-p0-sNO-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	Sp1-002-p0-sNO-010 / -075 (incl. Global Calibration i5)
	max.	3000	40	3750			1250	1000	25	

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	Sp1-001-p0-sNO-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	Sp1-002-p0-sNO-010 / -075 (incl. Global Calibration p1)
	max.	3000	5000	4250	1250	1000	