

# spectro::lyser™

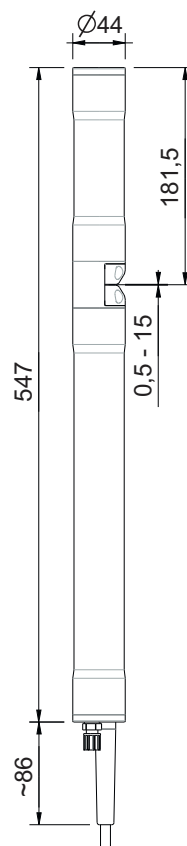
spectro::lyser™ UV monitors depending on the application an individual selection of: NO<sub>3</sub>-N, COD, BOD, TOC, DOC, UV254, NO<sub>2</sub>-N, BTX, fingerprints and spectral alarms, temperature and pressure

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

- s::can plug & measure
- measuring principle: UV-Vis spectrometry over the total range (220-720 nm or 220-390 nm)
- multiparameter probe
- ideal for surface water, ground water, drinking water and waste water
- long term stable and maintenance free in operation
- factory precalibrated
- automatic cleaning with compressed air
- 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
- easy mounting without clogging

## recommended accessories

part number	article name
A-500-s	Inserts for optical pathlength 0.5 mm, stainless steel
B-32-xxx	s::can compressor
B-44	cleaning valve
B-61-1	cleaning agent
C-210-spectro	10 m extension cable for s::can™ spectrometer probes
D-315-xxx	con::cube
F-120-spectro	carrier s::can™ spectrometer probe
F-110-spectro	carrier s::can™ spectrometer probe
F-445-1	flow cell - for pathlengths from 0.5 mm to 35 mm
F-445-2	flow cell - for pathlength 100 mm
F-446-1	flow cell autobrush - for spectro::lyser™ pathlength 35 mm
F-446-2	flow cell autobrush - for spectro::lyser™ pathlength 100 mm
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 220 - 720 nm UV spectrometry 220 - 390 nm	cable type	TNPU jacket
measuring principle detail	xenon flash lamp, 256 photo diodes	housing material	stainless steel 1.4404
automatic compensation instrument	two beam measurement, complete spectrum	weight (min.)	3,4 kg (incl. cable)
automatic compensation cross sensitivities	turbidity / solids / organic substances	dimensions (diameter x length)	44 mm x 547 mm / 633 mm
precalibrated ex-works	all parameters	operating temperature	0 ... 45 °C
accuracy standard solution (>1 mg/l)	NO <sub>3</sub> -N: +/- 2% +1/OPL[mg/l]* COD-KHP: +/-2% +10/OPL[mg/l]* (* OPL ... optical pathlength in mm)	storage temperature	-10 ... 50 °C
access to raw signals	access to spectral information	operating pressure	0 ... 3 bar
reference standard	distilled water	high pressure specification	10 bar
onboard memory	656 KB	explosion proof specification (optional)	ATEX according to EN60079-0
integrated temperature sensor	-10 ... 50 °C	installation / mounting	submersed or in a flow cell
resolution temperature sensor	0.1 °C	flowrate	3 m/s (max.)
integrated pressure sensor (optional)	0 ... 1,2/2/11 bar	mechanical stability	30 Nm
resolution pressure sensor	1:1000 of measuring range	protection class	IP68
integration via	con::nect con::cube	automatic cleaning	media: compressed air permissible pressure: 4 ... 6 bar air volume: 7 ... 20 liters per cleaning cleaning duration (typical): 3 ... 15 seconds per cleaning cleaning interval: every 1st to 10th measuring interval, depending on application delay: 10 ... 30 seconds
power supply	11 ... 15 VDC	conformity - EMC	EN 61326:97/A1:98/A2:01
power consumption (typical)	4.2 W	conformity - safety	EN 61010-1:2002
power consumption (max.)	20 W	extended spare part warranty (optional)	3 years
interface connection to s::can terminals	MIL connector, IP68, RS485, 12 VDC		
interface to third party terminals	con::nect incl. gateway modbusRTU		
cable length	7.5 m fixed cable (-075) or 1 m fixed cable (-010)		

Spectrometer  
Probes

i::scan

Ionscane  
Probes

Physical Probes

Terminals

Software

System  
ConfigurationMonitoring  
StationsSpare Parts &  
AccessoriesServices &  
Solutions



**municipal WWTP influent & sewer**

		typical concentration ranges for this application								part number
		TSS [mg/l]	NO <sub>3</sub> -N [mg/l]	COD [mg/l]	CODf [mg/l]	BOD [mg/l]	UV254 [Abs/m]	UV254f [Abs/m]	H <sub>2</sub> S [mg/l]	
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> -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	750		
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> -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	750		
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> -N, COD, H <sub>2</sub> S, UV254, UV254f)	min.	0	0	0			0	0	0	Sp1-002-p0-sNO-010 / -075 (incl. Global Calibration i5)
	max.	3000	40	3750			1250	750	25	

**diary WWTP influent**

		typical concentration ranges for this application						
		TSS [mg/l]	NO <sub>3</sub> -N [mg/l]	COD [mg/l]	CODf [mg/l]	UV254 [Abs/m]	UV254f [Abs/m]	part number
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> -N, COD, CODf, UV254, UV254f)	min.	100	0	200	100	0	0	Sp1-001-p0-sNO-010 / -075 (incl. Global Calibration m1)
	max.	3000	80	12500	5000	2500	1500	

**paper mill WWTP influent**

paper mm WWT influent		typical concentration ranges for this application					
		TSS [mg/l]	COD [mg/l]	CODf [mg/l]	UV254 [Abs/m]	UV254f [Abs/m]	part number
spectro::lyser™ UV-Vis (TSS, COD, CODf, UV254, UV254f)	min.	0	875	875	0	0	Sp1-002-p0-sNO-010 / -075 (incl. Global Calibration p1)
	max.	2500	5000	4250	1250	750	

**brewery WWTP influent**

brewery wastewater influent		typical concentration ranges for this application				
		TSS [mg/l]	COD [mg/l]	UV254 [Abs/m]	UV254f [Abs/m]	part number
spectro::lyser™ UV-Vis (TSS, COD, UV254, UV254f)	min.	0	500	0	0	Sp1-002-p0-sNO-010 / -075 (incl. Global Calibration b1)
	max	5000	45000	1250	750	

**municipal WWTP aeration**

typical concentration ranges for this application									
		TSS [mg/l]	TSS est [mg/l]	NO <sub>3</sub> -N [mg/l]	NO <sub>2</sub> -N [mg/l]	CODf [mg/l]	UV254 [Abs/m]	UV254f [Abs/m]	part number
spectro::lyser™ UV (TSS est, NO <sub>3</sub> -N, CODf, UV254, NO <sub>2</sub> -N)	min.	0	0	0	0	0	0		Sp2-001-p0-sNO-010 / -075 (incl. Global Calibration I1)
	max.	6000	100	500	1000	2500			
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> -N, CODf, UV254, UV254f)	min.	0		0		0	0	0	Sp1-001-p0-sNO-010 / -075 (incl. Goba Calibration I1)
	max.	15000		20		400	2500	1500	

**municipal WWTP effluent**

		typical concentration ranges for this application								part number
		TSS [mg/l]	TSS est [mg/l]	NO <sub>3</sub> -N [mg/l]	NO <sub>2</sub> -N [mg/l]	COD [mg/l]	CODf [mg/l]	UV254 [Abs/m]	UV254f [Abs/m]	
spectro::lyser™ UV (TSS est, NO <sub>3</sub> -N, COD, UV254, NO <sub>2</sub> )	min.	0	0	0	0	0		0		Sp2-005-p0-sNO-010 / -075 (incl. Global Calibration e2)
	max.		300	50	10	500		500		
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> -N, COD, CODf, UV254, UV254f)	min.	0		0		0	0	0	0	Sp2-005-p0-sNO-010 / -075 (incl. Global Calibration e1)
	max.	500		25		500	300	500	300	

**paper mill WWTP effluent**

		typical concentration ranges for this application						
		TSS [mg/l]	NO <sub>3</sub> -N [mg/l]	COD [mg/l]	CODf [mg/l]	UV254 [Abs/m]	UV254f [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	Sp1-002-p0-sNO-010 / -075 (incl. Global Calibration q1)
	max.	1000	10	350	350	1250	750	