

# spectro::lyser™

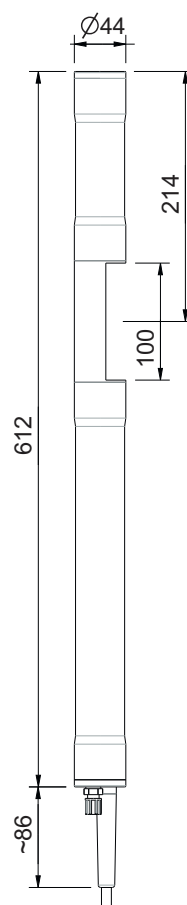
spectro::lyser™ UV monitors depending on the application an individual selection of: NO<sub>3</sub>-N, COD, BOD, TOC, DOC, UV254, NO<sub>2</sub>-N, BTX, fingerprints and spectral alarms, temperature and pressure

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
- robust and precise 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

## 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
precalfibrated 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)		

**ground water**

		typical concentration ranges for this application											part number
		turbidity [FTU]	turbidity est [FTU]	NO <sub>3</sub> -N [mg/l]	NO <sub>2</sub> -N [mg/l]	TOC [mg/l]	DOC [mg/l]	UV254 [Abs/m]	UV254f [Abs/m]	color hazen-t [Hazen]	color hazen-f [Hazen]	H <sub>2</sub> S [mg/l]	
spectro::lyser™ UV (turbidity est, NO <sub>3</sub> -N, TOC, UV254, NO <sub>2</sub> -N)	min.	0	0	0	0	0	0	0					Sp2-035-p0-sNO-010 / -075 (incl. Global Calibration g2)
	max.	60	20	1	25	70							
spectro::lyser™ UV-Vis (turbidity, NO <sub>3</sub> -N, TOC, DOC, H <sub>2</sub> S)	min.	0	0	0	0	0	0					0	Sp1-035-p0-sNO-010 / -075 (incl. Global Calibration g5)
	max.	150	20	25	20							20	
spectro::lyser™ UV-Vis (turbidity, NO <sub>3</sub> -N, TOC, DOC, UV254, hazen)	min.	0	0	0	0	0	0			0	0		Sp1-035-p0-sNO-010 / -075 (incl. Global Calibration g7)
	max.	150	20	25	20	75			300	200			
spectro::lyser™ UV-Vis (turbidity, NO <sub>3</sub> -N, TOC, DOC, UV254, UV254f)	min.	0	0	0	0	0	0	0					Sp1-035-p0-sNO-010 / -075 (incl. Global Calibration g1)
	max.	150	20	25	20	75	50						

**surface water**

		typical concentration ranges for this application											part number
		turbidity [FTU]	turbidity est [FTU]	NO <sub>3</sub> -N [mg/l]	NO <sub>2</sub> -N [mg/l]	TOC [mg/l]	DOC [mg/l]	UV254 [Abs/m]	UV254f [Abs/m]	color hazen-t [Hazen]	color hazen-f [Hazen]		
spectro::lyser™ UV (turbidity est, NO <sub>3</sub> -N, TOC, UV254, NO <sub>2</sub> -N)	min.	0	0	0	0	0	0	0					Sp2-035-p0-sNO-010 / -075 (incl. Global Calibration r2)
	max.	80	10	1	25	70							
spectro::lyser™ UV (turbidity est, NO <sub>3</sub> -N, TOC, UV254, NO <sub>2</sub> -N)	min.	0	0	0	0	0	0	0					Sp2-005-p0-sNO-010 / -075 (incl. Global Calibration r2)
	max.	500	70	1	150	500							
spectro::lyser™ UV-Vis (turbidity, NO <sub>3</sub> -N, TOC, DOC, UV254, UV254f, hazen-f, hazen-t)	min.	0	0	0	0	0	0	0	0	0	0		Sp1-035-p0-sNO-010 / -075 (incl. Global Calibration r1)
	max.	200	10	25	12	70	50	80	50				
spectro::lyser™ UV-Vis (turbidity, NO <sub>3</sub> -N, TOC, DOC, UV254, UV254f, hazen-f, hazen-t)	min.	0	0	0	0	0	0	0	0	0	0		Sp1-005-p0-sNO-010 / -075 (incl. Global Calibration r1)
	max.	1400	70	150	90	500	300	500	350				

**drinking water**

		typical concentration ranges for this application												
		turbidity [FTU]	turbidity est [FTU]	NO <sub>3</sub> -N [mg/l]	NO <sub>2</sub> -N [mg/l]	TOC [mg/l]	DOC [mg/l]	UV254 [Abs/m]	UV254f [Abs/m]	CLD [mg/l]	color hazen-t [Hazen]	color hazen-f [Hazen]	O <sub>3</sub> [mg/l]	part number
spectro::lyser™ UV (turbidity est, NO <sub>2</sub> -n, NO <sub>3</sub> -N, TOC, DOC, UV254)	min.		0	0	0	0	0	0						Sp2-100-p0-sNO-010 / -075 (incl. Global Calibration d2)
	max.		20	10	1	8	6	25						
spectro::lyser™ UV-Vis (turbidity, NO <sub>3</sub> -N, TOC, DOC, UV254, UV254f, CLD)	min.	0		0		0	0	0	0	0				Sp1-100-p0-sNO-010 / -075 (incl. Global Calibration d3)
	max.	50		7		10	6	25	15	8				
spectro::lyser™ UV-Vis (turbidity, NO <sub>3</sub> -N, TOC, DOC, UV254, UV254f, O <sub>3</sub> )	min.	0		0		0	0	0	0				0	Sp1-100-p0-sNO-010 / -075 (incl. Global Calibration d5)
	max.	50		10		8	6	25	15				10	
spectro::lyser™ UV-Vis (turbidity, NO <sub>3</sub> -N, TOC, DOC, UV254, UV254f, hazen-f, hazen-t)	min.	0		0		0	0	0	0		0	0		Sp1-100-p0-sNO-010 / -075 (incl. Global Calibration d7)
	max.	50		7		10	6	25	15		100	70		