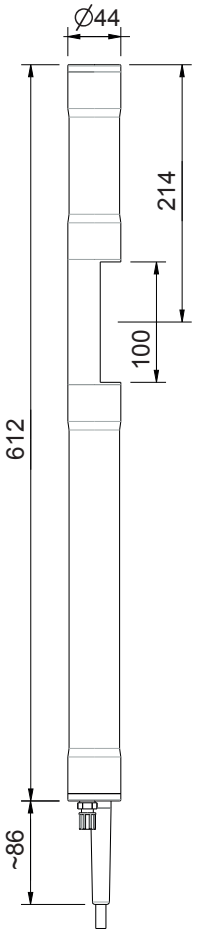
spectro::lyser™

spectro::lyser™ UV monitors depending on the application an individual selection of: TSS (est), turbidity (est) NO_3-N, COD, BOD, TOC, UV254, NO_2-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_3-N, COD, BOD, TOC, DOC, UV254, color, BTX, O_3, 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 or 190-390 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/ruck::sack
- 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 15 mm or 5 mm possible
- easy mounting without clogging



recommended accessories	
part number	**article name**
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 B-44-2	cleaning valve
B-61-1	cleaning agent
D-315-xxx	con::cube
F-110-spectro	carrier s::can™ spectrometer probe
F-120-spectro	carrier s::can™ spectrometer probe
F-445-2	flow cell - for pathlength 100 mm
F-446-2	flow cell autobrush - for spectro::lyser™ pathlength 100 mm
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)	44 x 612 mm / 656 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

ground water

		concentration ranges and sensor/probe type for this application											
		turbidity [NTU/FTU]	turbidity est [NTU/FTU]	NO_3-N [mg/l]	NO_2-N [mg/l]	TOC [mg/l]	DOC [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	color (app) [Hazen]	color (tru) [Hazen]	H_2S [mg/l]	part number
spectro::lyser™ UV (turbidity est, NO_3-N, TOC, UV254, NO_2-N)	min.		0	0	0	0		0					Sp2-035-p0-sNO-010 / -075 (incl. Global Calibration g2)
	max.		170	20	5	20		70					
spectro::lyser™ UV-Vis (turbidity, NO_3-N, TOC, DOC, H2S)	min.	0		0		0	0					0	Sp1-035-p0-sNO-010 / -075 (incl. Global Calibration g5)
	max.	170		20		20	15					20	
spectro::lyser™ UV-Vis (turbidity, NO_3-N, TOC, DOC, UV254, hazen)	min.	0		0		0	0	0		0	0		Sp1-035-p0-sNO-010 / -075 (incl. Global Calibration g7)
	max.	170		20		20	15	70		300	200		
spectro::lyser™ UV-Vis (turbidity, NO_3-N, TOC, DOC, UV254, UV254f)	min.	0		0		0	0	0	0				Sp1-035-p0-sNO-010 / -075 (incl. Global Calibration g1)
	max.	170		20		20	15	70	55				

surface water

		concentration ranges and sensor/probe type for this application										
		turbidity [NTU/FTU]	turbidity est [NTU/FTU]	NO_3-N [mg/l]	NO_2-N [mg/l]	TOC [mg/l]	DOC [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	color (app) [Hazen]	color (tru) [Hazen]	part number
spectro::lyser™ UV (turbidity est, NO_3-N, TOC, UV254, NO_2)	min.		0	0	0	0		0				Sp2-035-p0-sNO-010 / -075 (incl. Global Calibration r2)
	max.		200	15	5	30		70				
spectro::lyser™ UV (turbidity est, NO_3-N, TOC, UV254, NO_2)	min.		0	0	0	0		0				Sp2-015-p0-sNO-010 / -075 (incl. Global Calibration r2)
	max.		465	35	15	60		165				
spectro::lyser™ UV (turbidity est, NO_3-N, TOC, UV254, NO_2-N)	min.		0	0	0	0		0				Sp2-005-p0-sNO-010 / -075 (incl. Global Calibration r2)
	max.		1400	100	40	180		500				
spectro::lyser™ UV-Vis (turbidity, NO_3-N, TOC, DOC, UV254, UV254f, hazen-f, hazen-t)	min.	0		0		0	0	0	0	0	0	Sp1-035-p0-sNO-010 / -075 (incl. Global Calibration r1)
	max.	200		15		30	20	70	55	500	300	
spectro::lyser™ UV-Vis (turbidity, NO_3-N, TOC, DOC, UV254, UV254f, hazen-f, hazen-t)	min.	0		0		0	0	0	0	0	0	Sp1-015-p0-sNO-010 / -075 (incl. Global Calibration r1)
	max.	465		35		60	45	165	135	1165	700	
spectro::lyser™ UV-Vis (turbidity, NO_3-N, TOC, DOC, UV254, UV254f, hazen-f, hazen-t)	min.	0		0		0	0	0	0	0	0	Sp1-005-p0-sNO-010 / -075 (incl. Global Calibration r1)
	max.	1400		100		180	140	500	400	3500	2100	

drinking water

		concentration ranges and sensor/probe type for this application												
		turbidity [NTU/ FTU]	turbidity est [NTU/FTU]	NO_3-N [mg/l]	NO_2-N [mg/l]	TOC [mg/l]	DOC [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	CLD [mg/l]	color (app) [Hazen]	color (tru) [Hazen]	O_3 [mg/l]	part number
spectro::lyser™ UV (turbidity est, NO_2-n, NO_3-N, TOC, DOC, UV254)	min.		0	0	0	0		0						Sp2-100-p0-sNO-010 / -075 (incl. Global Calibration d2)
	max.		60	7	2	8		25						
spectro::lyser™ UV-Vis (turbidity, NO_3-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.	60		7		8	6	25	20	8				
spectro::lyser™ UV-Vis (turbidity, NO_3-N, TOC, DOC, UV254, UV254f, O_3)	min.	0		0		0	0	0	0				0	Sp1-100-p0-sNO-010 / -075 (incl. Global Calibration d5)
	max.	60		7		8	6	25	20				9	
spectro::lyser™ UV-Vis (turbidity, NO_3-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.	60		7		8	6	25	20		105	70		