

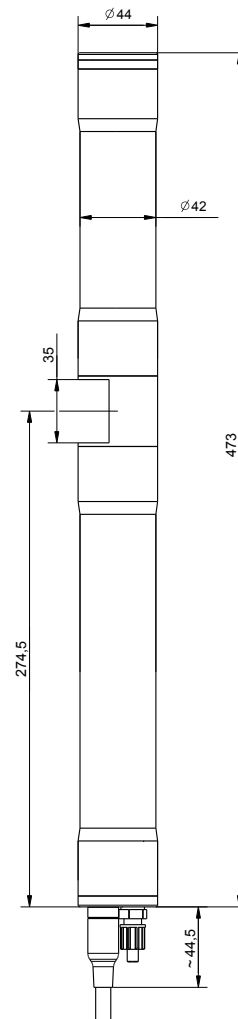
spectro::lyser V3

spectro::lyser® UV-Vis monitors depending on the application an individual selection of: TSS, TS, turbidity, color, TOC, DOC, BOD, COD, NO₃-N, NO₃, HS-, O₃, CLD, UV254, fingerprints, spectral alarms and temperature

- measuring principle: UV-Vis spectrometry over the total range (190-750 nm)
- web server on board - IoT enabled, no user software is needed to configure the probe
- communicates directly with your mobile device via WLAN
- 8 GB onboard memory - capacity for logging data for many years
- improved optical performance - revolutionary precision
- fast measurement interval - every 10 seconds possible
- extremely power efficient - sleep mode for low energy consumption
- multiparameter probe with 1 mm, 5 mm or 35 mm optical path length, ideal for waste water, surface water and drinking water
- long term stable and maintenance free in operation
- factory precalibrated, local multi-point calibration possible
- automatic cleaning with compressed air or brush

recommended accessories

part number	article name
B-32-xxx	s::can compressor
B-33-012	con::nect V3
B-44	cleaning valve
B-44-2	
C-32-V3	Adapter cable to connect a V3 spectrometer (M12) to V2 Terminal (MIL Plug)
D-330-xxx	con::cube V3
F-110-V3	carrier s::can spectrometer V3 & V2 probe, 45°
F-120-V3	carrier s::can spectrometer V3 & V2 probe, vertical attachment
F-446-V3	flow cell AutoBrush, POM-C (for spectrometer V3 & V2 pathlength 35 mm)
S-11-xx-moni	moni::tool Software



technical specification

measuring principle	UV-Vis spectrometry 190 - 750 nm	internal sensors	supply voltage sensor, tilt sensor, rotation sensor
measuring principle detail	xenon flash lamp, pixel array detector	cable length	1 m fixed cable (-010) or 7.5 m fixed cable (-075) or 15 m fixed cable (-150)
measurement interval	10 sec (configurable, depending on application)	cable type	PU jacket
automatic compensation instrument	real dual beam measurement for compensation and detailed diagnostics	housing material	stainless steel 1.4404
automatic compensation cross sensitivities	turbidity / solids / organic substances	window material	optical path length 5 and 1 mm: sapphire optical path length 35 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 mm: 44 x 473 mm / 517.5 mm optical path length 5 mm: 44 x 457 mm / 501.5 mm optical path length 1 mm: 44 x 453 mm / 497.5 mm
access to raw signals	access to spectral information	operating temperature	0 ... 45 °C
reference standard	distilled water	operating pressure	0 ... 3 bar
onboard memory	8 GB	high pressure specification (optional)	10 bar
integrated temperature sensor	0 ... 45 °C	installation / mounting	submersed or in a flow cell
resolution temperature sensor	0.1 °C	flow velocity	3 m/s (max.)
integration via	con::cube V3 con::nect V3 con::lyte V5 (D-320-pro2) and adapter cable (C-32-V3)	mechanical stability	30 Nm
power supply	10 ... 18 VDC	ingress protection class	IP68
power consumption (typical)	3 W	automatic cleaning	media: compressed air or autobrush permissible pressure: 3 ... 6 bar
power consumption (sleep model)	60 mW	storage temperature	-10 ... 65 °C
power consumption (max.)	20 W	conformity - environmental testing	EN 60721-3
interface to s::can terminals	M12 RSTS 8Y (IP67), RS485, Ethernet	conformity - EMC	EN 61326-1
interface to third party terminals	con::nect V3 incl. Modbus RTU, REST API, Modbus TCP/IP	conformity - RoHS 2	EN 50581
digital interface (for cleaning devices)	1 digital in/out 1 digital out	standard warranty	2 years
network connection	100Base-T Ethernet, WLAN	extended warranty (optional)	3 years
status information	RGB LED ring		

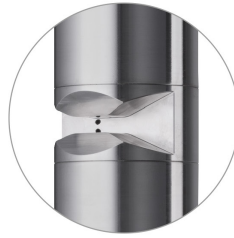
The perfect accuracy for every application

The spectro::lyser V3 is available with three different optical path lengths.



drinking water:

35 mm



surface water:

5 mm



waste water:

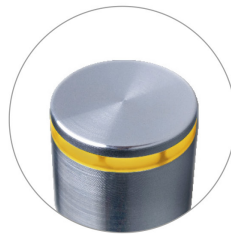
1 mm

Optical information ring

The color of the optical information ring signals the state of the sensor.



everything
okay



sensor in
service mode



parameter or device
error

Wireless communication - Io::Tool

Intuitive web interface for data visualization and configuration of the spectro::lyser V3.



ground water

		parameter											part number
		turbidity [NTU/FTU]	color (app) [Hazen]	color (tru) [Hazen]	TOC [mg/l]	DOC [mg/l]	NO ₃ [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	BTX [mg/l]	H ₂ S [mg/l]		
spectro::lyser™ V3 (35 mm OPL, UV-Vis)	min.	0	0	0	0	0	0	0	0	0	0	0	
	max.	170	500	300	20	15	88	71	60	51	5		

surface water

		parameter															part number
		TSS [mg/l]	turbidity [NTU/FTU]	color (app) [Hazen]	color (tru) [Hazen]	TOC [mg/l]	DOC [mg/l]	BOD [mg/l]	COD [mg/l]	COD f [mg/l]	NO ₃ [mg/l]	HS- [mg/l]	Chl-a [µg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	BTX [mg/l]	
spectro::lyser™ V3 (35 mm OPL, UV-Vis)	min.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	max.	170	200	500	300	30	25	42	71	42	66	5	100	71	60	51	
spectro::lyser™ V3 (5 mm OPL, UV-Vis)	min.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	max.	1200	1400	3500	2100	210	180	300	500	300	460	35	700	500	420	360	

drinking water

		parameter											part number
		turbidity [NTU/FTU]	color (app) [Hazen]	color (tru) [Hazen]	TOC [mg/l]	DOC [mg/l]	NO ₃ [mg/l]	chloramine [mg/l]	O ₃ [mg/l]	CLD [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	
spectro::lyser™ V3 (35 mm OPL, UV-Vis)	min.	0	0	0	0	0	0	0	0	0	0	0	
	max.	170	500	300	22	17	88	42	25	22	71	60	