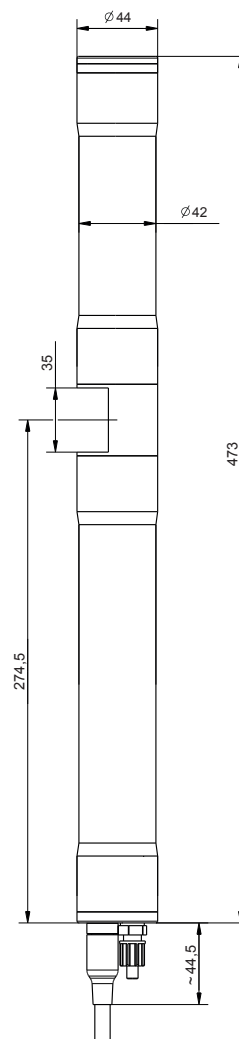




spectro::lyser[®] V3

spectro::lyser™ UV-Vis monitors depending on the application an individual selection of: TSS, turbidity, color, TOC, DOC, BOD, COD, NO₃-N, NO₃⁻, chloramine, HS⁻, O₃, CLD, Chl-a, BTX, 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 Bluetooth or WLAN
- choose exactly the parameters you want to measure – unlimited number of parameters possible
- 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/ruck::sack



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	
D-330-xxx	con::cube V3
F-110-V3	carrier s::can spectrometer V3 & V2 probe, 45 degree
F-120-V3	carrier s::can spectrometer V3 & V2 probe, vertical
F-446-V3	flow cell (by-pass fitting), AutoBrush, POM-C (for spectro::lyser V3 & V2 pathlength 35 mm)
S-11-xx-moni	moni::tool Software

technical specification

measuring principle	UV-Vis spectrometry 190 - 750 nm
measuring principle detail	xenon flash lamp, pixel array detector
automatic compensation instrument	real dual beam measurement for compensation and detailed diagnostics
automatic compensation of 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	8 GB
integrated temperature sensor	0 ... 45 °C
resolution temperature sensor	0.1 °C
integration via	con::cube V3 (D-330-xxx) con::nect V3 (B-33-012) con::lyte V5 (D-320-pro2) and adapter cable (C-32-V3)
power supply	10 ... 18 VDC
power consumption (typical)	3 W
power consumption (sleep mode)	60 mW
power consumption (max.)	20 W
interface to s::can terminals	M12 RSTS 8Y (IP67), RS485, Ethernet
interface to third party terminals	con::nect V3 incl. Modbus RTU, REST API
digital interface (for cleaning devices)	1 digital in/out 1 digital out
network connection	100Base-T Ethernet, Bluetooth, WLAN
measurement interval	10 sec (configurable, depending on application)

status information	RGB LED ring
internal sensors	supply voltage sensor, tilt sensor, rotation sensor
cable length	1 m fixed cable (-010) or 7.5 m fixed cable (-075) or 15 m fixed cable (-150) or 30 m fixed cable (-300)
cable type	PU jacket
housing material	stainless steel 1.4404
window material	optical path length 5 and 1 mm: sapphire optical path length 35 mm: fused silica (UV-grade)
weight (min.)	3.4 kg (incl. cable)
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
operating temperature	0 ... 45 °C
storage temperature	-10 ... 65 °C
operating pressure	0 ... 3 bar
high pressure specification (optional)	10 bar
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 or autobrush permissible pressure: 3 ... 6 bar
conformity environmental testing	EN 60721-3
conformity - EMC	EN 61326-1
conformity - RoHS2	EN 50581
standard warranty	2 years
extended warranty (optional)	3 years

ground water

	parameter*												part number
	turbidity [NTU/FTU]	color (app) [Hazen]	color (true) [Hazen]	TOC [mg/l]	DOC [mg/l]	NO ₃ -N [mg/l]	NO ₃ ⁻ [mg/l]	HS ⁻ [mg/l]	BTX [mg/l]	UV254 t [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	SP3-1-35-N0-xxx
	max.	170	500	300	20	15	20	88	5	51	71	60	
parameter part no.	GC-G-TURB	GC-G-COL		GC-G-TOC		GC-G-NO3-N		GC-G-HS	GC-G-BTX	GC-G-UV254			

surface water

	parameter*																part number
	TSS [mg/l]	turbidity [NTU/FTU]	color (app) [Hazen]	color (true) [Hazen]	TOC [mg/l]	DOC [mg/l]	BOD [mg/l]	COD [mg/l]	COD f [mg/l]	NO ₃ -N [mg/l]	NO ₃ ⁻ [mg/l]	Chl-a [µg/l]	HS ⁻ [mg/l]	BTX [mg/l]	UV254 t [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	0	0	0	0	SP3-1-35-N0-xxx
	max.	170	200	500	300	30	25	42	71	42	15	66	100	5	51	71	
spectro::lyser™ V3 (5 mm OPL, UV-Vis)	min.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SP3-1-05-N0-xxx
	max.	1200	1400	3500	2100	210	180	300	500	300	100	460	700	35	360	500	
parameter part no.	GC-R-TSS	GC-R-TURB	GC-R-COL		GC-R-TOC		GC-R-BOD	GC-R-COD		GC-R-NO3-N		GC-R-CHL-A	GC-R-HS	GC-R-BTX	GC-R-UV254		

drinking water

	parameter*													part number
	turbidity [NTU/FTU]	color (app) [Hazen]	color (true) [Hazen]	TOC [mg/l]	DOC [mg/l]	NO ₃ -N [mg/l]	NO ₃ ⁻ [mg/l]	Chloramine [mg/l]	O ₃ [mg/l]	CLD [mg/l]	UV254 t [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	SP3-1-35-N0-xxx	
	max.	170	500	300	22	17	20	88	42	25	22	71		60
parameter part no.	GC-D-TURB	GC-D-COL		GC-D-TOC		GC-D-NO3-N		GC-D-CHLORAMINE	GC-D-O3	GC-D-CLD	GC-D-UV254			

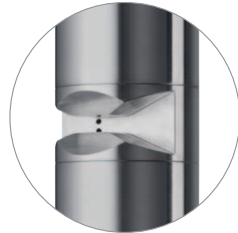
*measurable concentration ranges may vary due to water matrix

The perfect accuracy for every application

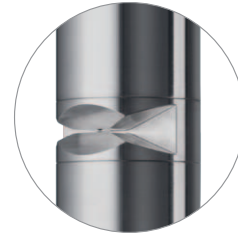
The spectro::lyser V3 is available with three different optical path lengths.



drinking water:
35 mm



surface water:
5 mm



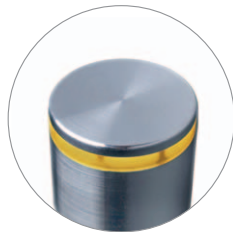
waste water:
1 mm

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.

