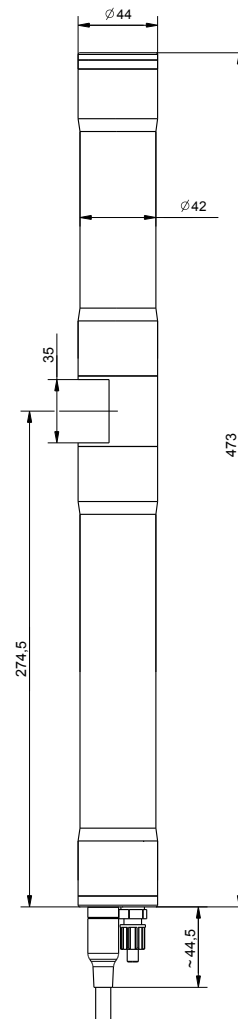# uv::lyser V - V3

uv::lyser V monitors turbidity and up to 4 freely selectable wavelengts

- · 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 30 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
D-330-xxx	con::cube V3
D-320-pro2-230	con::lyte pro
B-33-012	con::nect V3
B-32-xxx	s::can compressor
B-44 B-44-2	cleaning valve
C-32-V3	Adapter cable to connect a V3 spectrometer (M12) to V2 Terminal (MIL Plug)
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
F-146-rs-x	ruck::sack (submersible Autobrush)

technical specification

measuring principle	UV-Vis spectrometry 200 - 750 nm
measurement interval	30 sec (configurable, depending on application)
automatic compensation cross sensitivities	turbidity / solids / organic substances
precalibrated ex-works	all parameters
accuracy standard solution (>1 mg/l)	NO_3-N: +/- 3% +1/OPL[mg/l]* $\quad$ COD-KHP: +/-3% +10/OPL[mg/l]* $\quad$ (* OPL ... optical pathlength in mm)
access to raw signals	no
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 $\quad$ con::nect V3 $\quad$ 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 model)	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, Modbus TCP/IP
digital interface (for cleaning devices)	1 digital in/out $\quad$ 1 digital out
internal sensors	supply voltage sensor, tilt sensor, rotation sensor
network connection	100Base-T Ethernet, WLAN
status information	RGB LED ring

cable length	1 m fixed cable (-010) or $\quad$ 7.5 m fixed cable (-075) or $\quad$ 15 m fixed cable (-150)
cable type	PU jacket
housing material	stainless steel 1.4404 (optional titanium)
window material	optical path length 5 and 1 mm: sapphire $\quad$ 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: $\quad$ 44 x 473 mm / 517.5 mm $\quad$ optical path length 5 mm: $\quad$ 44 x 457 mm / 501.5 mm $\quad$ optical path length 1 mm: $\quad$ 44 x 453 mm / 497.5 mm
operating temperature	0 ... 50 °C
operating pressure	0 ... 5 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
storage temperature	-10 ... 65 °C
conformity - environmental testing	EN 60721-3
conformity - EMC	EN 61326-1
conformity - RoHS 2	EN 50581
standard guarantee	1 years
extended guarantee (optional)	3 years

surface water

		parameter			
		turbidity [NTU/FTU]	UV254 [Abs/m]	UV254 f [Abs/m]	part number
uv::lyser V (5 parameters, 5 mm OPL)	min.	0	0	0	G3-U5-R-05-NO-xxx
	max.	1400	500	420	

drinking water

		parameter			
		turbidity [NTU/FTU]	UV254 [Abs/m]	UV254 f [Abs/m]	part number
uv::lyser V (5 parameters, 35 mm OPL)	min.	0	0	0	G3-U5-D-35-NO-xxx
	max.	170	71	60	