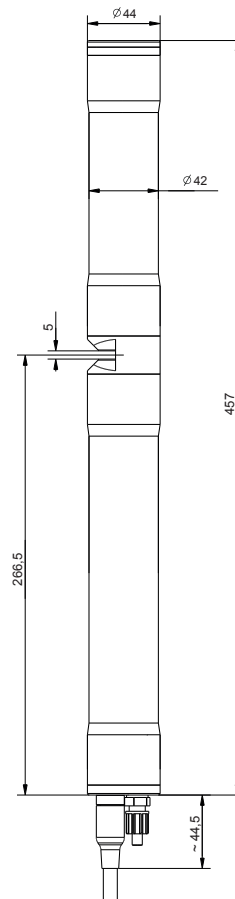


carbo::lyser™ II / III - V3

carbo::lyser™ II monitors 2 of the following parameters: TSS, TS, TOC, DOC, BOD, COD, COD f, UV254 and UV254 f

carbo::lyser™ III monitors 3 of the following parameters: TSS, TOC, DOC, BOD, COD, COD f, UV254 and UV254 f

- 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
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	cleaning valve
B-44-2	
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-48-V3	spectrometer V3 & V2 flow-cell (bypass setup), PVC
S-11-xx-moni	moni::tool Software
F-146-rs-35, F-146-rs-15, F-146-rs-05, F-146-rs-iscan-35, F-146-rs-iscan-05	ruck::sack

technical specification

measuring principle	UV-Vis spectrometry 200 - 750 nm	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 cross sensitivities	turbidity / solids / organic substances	housing material	stainless steel 1.4404 (optional titanium)
precalibrated ex-works	all parameters	window material	optical path length 5 and 1 mm: sapphire optical path length 35 mm: fused silica (UV-grade)
accuracy standard solution (>1 mg/l)	NO ₃ -N: +/- 3% +1/OPL[mg/l]* COD-KHP: +/-3% +10/OPL[mg/l]* (* OPL ... optical pathlength in mm)	weight (min.)	3.4 kg (incl. cable)
access to raw signals	no	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
reference standard	distilled water	operating temperature	0 ... 50 °C
onboard memory	8 GB	operating pressure	0 ... 5 bar
integrated temperature sensor	0 ... 45 °C	high pressure specification (optional)	10 bar
resolution temperature sensor	0.1 °C	installation / mounting	submersed or in a flow cell
integration via	con::cube V3 con::nect V3 con::lyte V5 (D-320-pro2) and adapter cable (C-32-V3)	flow velocity	3 m/s (max.)
power supply	10 ... 18 VDC	mechanical stability	30 Nm
power consumption (typical)	3 W	ingress protection class	IP68
power consumption (sleep model)	60 mW	automatic cleaning	media: compressed air or autobrush permissible pressure: 3 ... 6 bar
power consumption (max.)	20 W	storage temperature	-10 ... 65 °C
interface to s::can terminals	M12 RSTS 8Y (IP67), RS485, Ethernet	conformity - environmental testing	EN 60721-3
interface to third party terminals	con::nect V3 incl. Modbus RTU, REST API, Modbus TCP/IP	conformity - EMC	EN 61326-1
digital interface (for cleaning devices)	1 digital in/out 1 digital out	conformity - RoHS 2	EN 50581
network connection	100Base-T Ethernet, WLAN	standard warranty	2 years
status information	RGB LED ring	extended warranty (optional)	3 years
internal sensors	supply voltage sensor, tilt sensor, rotation sensor		

municipal WWTP influent & sewer

		parameter								part number
		TSS [mg/l]	TOC [mg/l]	DOC [mg/l]	BOD [mg/l]	COD [mg/l]	COD f [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	
carbo::lyser™ II (2 parameters, 1 mm OPL)	min.	0	0	0	0	0	0	0	0	G3-C2-I-01-NO-xxx
	max.	8000	3300	2600	5300	10000	5300	3300	2800	
carbo::lyser™ II (2 parameters, 5 mm OPL)	min.	0	0	0	0	0	0	0	0	G3-C2-I-05-NO-xxx
	max.	1200	500	400	800	1500	800	500	420	
carbo::lyser™ III (3 parameters, 1mm OPL)	min.	0	0	0	0	0	0	0	0	G3-C3-I-01-NO-xxx
	max.	8000	3300	2300	5300	10000	5300	3300	2800	
carbo::lyser™ III (3 parameters, 5 mm OPL)	min.	0	0	0	0	0	0	0	0	G3-C3-I-05-NO-xxx
	max.	1200	500	400	800	1500	800	500	420	

municipal WWTP effluent

		parameter								part number
		TSS [mg/l]	TOC [mg/l]	DOC [mg/l]	BOD [mg/l]	COD [mg/l]	COD f [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	
carbo::lyser™ II (2 parameters, 5 mm OPL)	min.	0	0	0	0	0	0	0	0	G3-C2-E-05-NO-xxx
	max.	600	400	300	300	500	300	500	420	
carbo::lyser™ III (3 parameters, 5 mm OPL)	min.	0	0	0	0	0	0	0	0	G3-C3-E-05-NO-xxx
	max.	600	400	300	300	500	300	500	420	