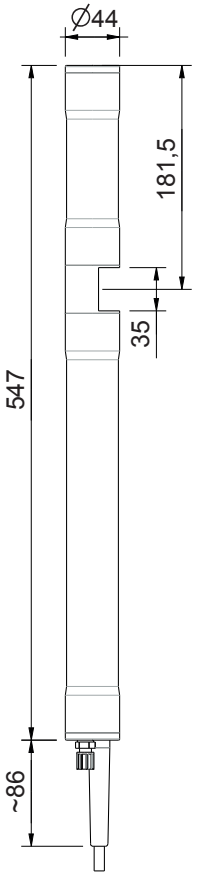
carbo::lyser™ II / III

carbo::lyser™ II monitors TSS & UV254 or TSS & COD or TSS & BOD or Turbidity & TOC or Turbidity & DOC

carbo::lyser™ III monitors TSS & UV254 & UV254f or TSS & COD & BOD or Turbidity & TOC & DOC or TSS & COD & CODf

- s::can plug & measure
- measuring principle: UV-Vis spectrometry over the total range (190-720 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
- 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 35 mm, 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
C-1-010-spectro	1 m connection cable for s::can spectrometer probes
D-315-xxx	con::cube
D-319-xxx	con::lyte
F-110-spectro	carrier s::can™ spectrometer probe
F-120-spectro	carrier s::can™ spectrometer probe
F-445-1	flow cell - for pathlengths from 0.5 mm to 35 mm
F-446-1	flow cell autobrush - for spectro::lyser™ pathlength 35 mm
S-11-xx-moni	moni::tool Software

technical specification

measuring principle	UV-Vis spectrometry 190 - 720 nm
measuring principle detail	xenon flash lamp, 256 photo diodes
automatic compensation instrument	two beam measurement, complete spectrum
automatic compensation cross sensitivities	turbidity / solids
precalibrated ex-works	all parameters
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)
access to raw signals	no
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::cube con::lyte con::nect
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 mm x 547 mm / 591 mm
operating temperature	0 ... 45 °C
storage temperature	-10 ... 50 °C
operating pressure	0 ... 3 bar
high pressure specification	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 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

surface water

		concentration ranges and sensor/probe type for this application					
		turbidity [NTU/FTU]	TOC [mg/l]	DOC [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	part number
carbo::lyser™ II (turbidity, DOC)	min.	0		0			C2-r005-p0-sNO-010 / -075
	max.	1400		140			
carbo::lyser™ II (turbidity, TOC)	min.	0	0				C2-r005-p0-sNO-010 / -075
	max.	1400	180				
carbo::lyser™ II (turbidity, UV254)	min.	0			0		C2-r005-p0-sNO-010 / -075
	max.	1400			500		
carbo::lyser™ II (turbidity, UV254f)	min.	0				0	C2-r005-p0-sNO-010 / -075
	max.	1400				400	
carbo::lyser™ III (turbidity, TOC, DOC)	min.	0	0	0			C3-r005-p0-sNO-010 / -075
	max.	1400	180	140			
carbo::lyser™ III (turbidity, UV254, UV254f)	min.	0			0	0	C3-r005-p0-sNO-010 / -075
	max.	1400			500	400	

drinking water

		concentration ranges and sensor/probe type for this application					
		turbidity [NTU/FTU]	TOC [mg/l]	DOC [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	part number
carbo::lyser™ II (turbidity, DOC)	min.	0		0			C2-d035-p0-sNO-010 / -075
	max.	170		15			
carbo::lyser™ II (turbidity, TOC)	min.	0	0				C2-d035-p0-sNO-010 / -075
	max.	170	20				
carbo::lyser™ II (turbidity, UV254)	min.	0			0		C2-d035-p0-sNO-010 / -075
	max.	170			70		
carbo::lyser™ II (turbidity, UV254f)	min.	0				0	C2-d035-p0-sNO-010 / -075
	max.	170				55	
carbo::lyser™ III (turbidity, TOC, DOC)	min.	0	0	0			C3-d035-p0-sNO-010 / -075
	max.	170	20	15			
carbo::lyser™ III (turbidity, UV254, UV254f)	min.	0			0	0	C3-d035-p0-sNO-010 / -075
	max.	170			70	55	