

carbo::lyser™ II / III

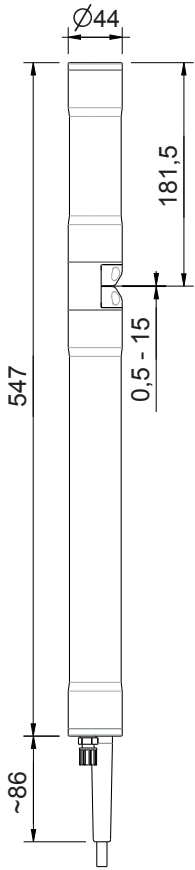
carbo::lyser™ II monitors TSS & UV254 or TSS & COD or TSS & BOD or Turbidity & TOC or Turbidity & DOC

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 or brush
- mounting and measurement directly in the media (InSitu) or in a flow cell (monitoring station)
- operation via s::can terminals & s::can software
- cleaning integrated
- adaption of optical path lengths to 5 mm, 2 mm, 1 mm or 0.5 mm possible
- easy mounting without clogging

recommended accessories

part number	article name
A-500-s	Inserts for optical pathlength 0.5 mm, stainless steel
A-001-s	Inserts for optical pathlength 1 mm, stainless steel
A-002-s	Inserts for optical pathlength 2 mm, stainless steel
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	cleaning valve
B-44-2	
B-61-1	cleaning agent
C-210-spectro	10 m extension cable for s::can™ spectrometer probes
C-220-spectro	20 m extension cable for s::can™ spectrometer probes
C-230-spectro	30 m extension cable for s::can™ spectrometer probes
D-315-xxx	con::cube
D-319-xxx	con::lyte
F-120-spectro	carrier s::can™ spectrometer probe
F-110-spectro	carrier s::can™ spectrometer probe
F-48-spectro	s::can spectrometer flow-cell (by-pass setup), PVC
S-11-xx-moni	moni::tool Software



technical specification

measuring principle	UV-Vis spectrometry 190 - 720 nm	cable type	PU jacket
measuring principle detail	xenon flash lamp, 256 photo diodes	housing material	stainless steel 1.4404
automatic compensation instrument	two beam measurement, complete spectrum	window material	optical path length 15 ... 0.5 mm: sapphire optional: optical path length 100 ... 5 mm: fused silica (UV-grade)
automatic compensation cross sensitivities	turbidity / solids		
precalibrated ex-works	all parameters	weight (min.)	3.4 kg (incl. cable)
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)	dimensions (Ø x l)	44 mm x 547 mm / 591 mm
access to raw signals	no	operating temperature	0 ... 45 °C
reference standard	distilled water	storage temperature	-10 ... 50 °C
onboard memory	656 KB	operating pressure	0 ... 3 bar
integrated temperature sensor	-10 ... 50 °C	high pressure specification	10 bar
resolution temperature sensor	0.1 °C	installation / mounting	submersed or in a flow cell
integrated pressure sensor (optional)	0 ... 1,2/2/11 bar	flow velocity	3 m/s (max.)
resolution pressure sensor	1:1000 of measuring range	mechanical stability	30 Nm
integration via	con::cube con::lyte con::nect	ingress protection class	IP68
power supply	11 ... 15 VDC	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.
power consumption (typical)	4.2 W	conformity - EMC	EN 61326-1, EN 61326-2-3
power consumption (max.)	20 W	conformity - safety	EN 61010-1
interface to s::can terminals	MIL connector (IP67), RS485	extended warranty (optional)	3 years
interface to third party terminals	con::nect incl. gateway modbusRTU		
cable length	7.5 m fixed cable (-075) or 1 m fixed cable (-010)		

municipal WWTP influent

		concentration ranges and sensor/probe type for this application						part number
		TSS [mg/l]	COD [mg/l]	COD f [mg/l]	BOD [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	
carbo::lyser™ II (TSS, BOD)	min.	0			0			C2-i002-p0-sNO-010 / -075
	max.	3000			2000			
carbo::lyser™ II (TSS, COD)	min.	0	0					C2-i002-p0-sNO-010 / -075
	max.	3000	3750					
carbo::lyser™ II (TSS, CODf)	min.	0		0				C2-i002-p0-sNO-010 / -075
	max.	3000		1250				
carbo::lyser™ II (TSS, UV254)	min.	0				0		C2-i002-p0-sNO-010 / -075
	max.	3000				1250		
carbo::lyser™ II (TSS, UV254f)	min.	0					0	C2-i002-p0-sNO-010 / -075
	max.	3000					1000	
carbo::lyser™ III (TSS, COD, BOD)	min.	0	0		0			C3-i002-p0-sNO-010 / -075
	max.	3000	3750		2000			
carbo::lyser™ III (TSS, COD, CODf)	min.	0	0	0				C3-i002-p0-sNO-010 / -075
	max.	3000	3750	1250				
carbo::lyser™ III (TSS, UV254, UV254f)	min.	0				0	0	C3-i002-p0-sNO-010 / -075
	max.	3000				1250	1000	

municipal WWTP effluent

		concentration ranges and sensor/probe type for this application						part number
		TSS [mg/l]	COD [mg/l]	COD f [mg/l]	BOD [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	
carbo::lyser™ II (TSS, COD)	min.	0	0					C2-e005-p0-sNO-010 / -075
	max.	600	500					
carbo::lyser™ II (TSS, CODf)	min.	0		0				C2-e005-p0-sNO-010 / -075
	max.	600		300				
carbo::lyser™ II (TSS, UV254)	min.	0				0		C2-e005-p0-sNO-010 / -075
	max.	600				500		
carbo::lyser™ II (TSS, UV254f)	min.	0					0	C2-e005-p0-sNO-010 / -075
	max.	600					400	
carbo::lyser™ III (TSS, COD, BOD)	min.	0	0		0			C3-e005-p0-sNO-010 / -075
	max.	600	500		300			
carbo::lyser™ III (TSS, COD, CODf)	min.	0	0	0				C3-e005-p0-sNO-010 / -075
	max.	600	500	300				
carbo::lyser™ III (TSS, UV254, UV254f)	min.	0				0	0	C3-e005-p0-sNO-010 / -075
	max.	600				500	400	