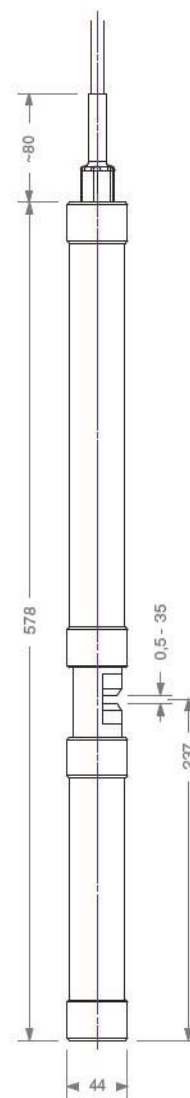


# spectro::lyser

- s::can plug & measure
- measuring principle: UV-Vis spectrometry over the total range (220-720 nm or 220-390 nm)
- multiparameter probe
- ideal for surface water, ground water, drinking water and waste water
- spectro::lyser™ UV monitors depending on the application an individual selection of: NO<sub>3</sub>-N, COD, BOD, TOC, DOC, UV254, NO<sub>2</sub>-N, BTX, AOC, fingerprints and spectralalarms, temperature and pressure
- spectro::lyser™ UV-Vis monitors depending on the application an individual selection of TSS, turbidity, NO<sub>3</sub>-N, COD, BOD, TOC, DOC, UV254, color, BTX, O<sub>3</sub>, H<sub>2</sub>S, AOC, fingerprints and spectral-alarms, temperature and pressure
- long term stable and maintenance free in operation
- factory precalibrated
- automatic cleaning with compressed air
- mounting and measurement directly in the media (InSitu) or in Bypass (monitoring station)
- operation via s::can terminals & s::can software

## recommended accessories

part number	article name
F-11-spectro	carrier s::can™ spectrometer probe
F-443-1	complete Bypass setup - for pathlengths from 1 mm to 35 mm
F-444-2	Bypass fitting brushable - for spectro::lyser™ pathlength 100 mm
F-50-1	system-panel BASIC
F-61	pontoon
B-60-1	cleaning brush for pathlength < 5 mm
B-61-1	cleaning agent
C-210-spectro	10 m extension cable for s::can™ spectrometer probes
E-411	cell holder insert
E-431-a	insert for shortening pathlength - anodised aluminium alloy
B-44	cleaning valve



technical specification			
measuring principle	UV-Vis spectrometry 220 - 720 nm UV spectrometry 220 - 390 nm	housing material	aluminium alloy ISO 3.2315, or stainless steel 1.4571
measuring principle detail	xenon flash light, 256 photo diodes	weight (min.)	2.1 kg
automatic compensation instrument	two beam measurement, complete spectrum	dimensions (diameter x length)	44mm x 578mm / 647mm
automatic compensation cross sensitivities	turbidity / solids / organic substances	operating temperature	0 ... 45 °C
precalibrated ex-works	all parameters	storage temperature	-10 ... 50 °C
accuracy standard solution (>1 mg/l)	NO <sub>3</sub> -N: +/- 3% +1/OPL[mg/l]* COD-KHP: +/-3% +10/OPL[mg/l]* (* OPL ... optical pathlength in mm)	operating pressure	0 ... 3 bar
access to raw signals	access to spectral information	high pressure specification	10 bar
reference standard	distilled water	explosion proof specification (optional)	according to EN60079-0, -1, ATEX
onboard memory	656 KB	installation / mounting	submersed or in Bypass (flow cell)
integrated temperature sensor	-10 ... 50 °C	flowrate	3 m/s (max.)
resolution temperature sensor	0.1 °C	mechanical stability	30 Nm
integrated pressure sensor (optional)	0 ... 10 bar	protection class	IP 68
resolution pressure sensor	2.5 mbar	automatic cleaning	media: compressed air permissible pressure: 3 to 8 bar air volume: 7 to 20 liter per cleaning cleaning duration: 3 to 15 seconds per cleaning cleaning interval: every 1st to 10th measuring interval, depending on application delay: 10 ... 30 seconds
integration via	con::nect con::stat	conformity - EMC	EN 61326:97/A1:98/A2:01
power supply	11 ... 15 VDC	conformity - safety	EN 61010-1:2002
power consumption (typical)	4.2 W	extended spare part warranty (optional)	3 years
power consumption (max.)	20 W		
interface connection to s::can terminals	MIL connector, IP 68, RS485, 12 VDC		
interface to third party terminals	con::nect incl. gateway modbusRTU		
cable length	7.5 m		
cable type	PU jacket		



**municipal waste water sewage**

		typical concentration ranges for this application								part number
		TSS [mg/l]	NO <sub>3</sub> -N [mg/l]	COD [mg/l]	CODf [mg/l]	BOD [mg/l]	UV254 [Abs/m]	UV254t [Abs/m]	H <sub>2</sub> S [mg/l]	
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> , COD, BOD, UV254, UV254t)	min.	0	0	0		0	0	0		A1-002-485-p0t0-1-sEX, stainless steel (incl. Global Calibration A-i3)
	max.	3000	40	3750		2000	750	1250		
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> , COD, CODf, UV254, UV254t)	min.	0	0	0	0		0	0		A1-002-485-p0t0-1-sEX, stainless steel (incl. Global Calibration A-i1)
	max.	3000	40	3750	1250		750	1250		
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> , COD, CODf, UV254, UV254t, H <sub>2</sub> S)	min.	0	0	0	0		0	0	0	A1 002 485 p0t0 1 sEX, stainless steel (incl. Global Calibration A-i5)
	max.	3000	40	3750	1250		750	1250	25	

**municipal WWTP influent & sewer**

		typical concentration ranges for this application								part number
		TSS [mg/l]	NO <sub>3</sub> -N [mg/l]	COD [mg/l]	CODf [mg/l]	BOD [mg/l]	UV254 [Abs/m]	UV254t [Abs/m]	H <sub>2</sub> S [mg/l]	
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> , COD, BOD, UV254, UV254t)	min.	0	0	0		0	0	0		A1-002-485-p0t0-1-sNO, stainless steel (incl. Global Calibration A-i3)
	max.	3000	40	3750		2000	750	1250		
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> , COD, CODf, UV254, UV254t)	min.	0	0	0	0		0	0		A1-002-485-p0t0-1-sNO, stainless steel (incl. Global Calibration A-i1)
	max.	3000	40	3750	1250		750	1250		
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> , COD, H <sub>2</sub> S, UV254, UV254t)	min.	0	0	0			0	0	0	A1-002-485-p0t0-1-sNO, stainless steel (incl. Global Calibration A-i5)
	max.	3000	40	3750			750	1250	25	

**diary WWTP influent**

		typical concentration ranges for this application						part number
		TSS [mg/l]	NO <sub>3</sub> -N [mg/l]	COD [mg/l]	CODf [mg/l]	UV254 [Abs/m]	UV254t [Abs/m]	
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> , COD, CODf, UV254, UV254t)	min.	100	0	200	100	0	0	A1-001-485-p0t0-1-sNO, stainless steel (incl. Global Calibration A-m1)
	max.	3000	80	12500	5000	1500	2500	

**paper mill WWTP influent**

		typical concentration ranges for this application					part number
		TSS [mg/l]	COD [mg/l]	CODf [mg/l]	UV254 [Abs/m]	UV254t [Abs/m]	
spectro::lyser™ UV-Vis (TSS, COD, CODf, UV254, UV254t)	min.	0	875	875	0	0	A1-002-485-p0t0-1-sNO, stainless steel (incl. Global Calibration A-p1)
	max.	2500	5000	4250	750	1250	

**brewery WWTP influent**

		typical concentration ranges for this application				part number
		TSS [mg/l]	COD [mg/l]	UV254 [Abs/m]	UV254t [Abs/m]	
spectro::lyser™ UV-Vis (TSS, COD, UV254, UV254t)	min.	0	500	0	0	A1-002-485-p0t0-1-sNO, stainless steel (incl. Global Calibration A-b1)
	max.	5000	45000	750	1250	

**municipal WWTP aeration**

		typical concentration ranges for this application					part number
		TSS [mg/l]	NO <sub>3</sub> -N [mg/l]	CODf [mg/l]	UV254 [Abs/m]	UV254t [Abs/m]	
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> , CODf, UV254, UV254t)	min.	0	0	0	0	0	A1-001-485-p0t0-1-aNO, aluminium (incl. Global Calibration A-l1)
	max.	15000	20	400	1500	2500	

**municipal WWTP effluent**

		typical concentration ranges for this application								part number
		TSS [mg/l]	TSS cst [mg/l]	NO <sub>3</sub> -N [mg/l]	COD [mg/l]	CODf [mg/l]	UV254 [Abs/m]	UV254t [Abs/m]	NO <sub>2</sub> -N [mg/l]	
spectro::lyser™ UV (TSS est, NO <sub>3</sub> , COD, UV254t, NO <sub>2</sub> )	min.		0	0	0			0	0	A2-005-485-p0t0-1-aNO, aluminium (incl. Global Calibration A-e2)
	max.		300	50	400			500	10	
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> , COD, CODf, UV254, UV254t)	min.	0		0	0	0	0	0		A1-005-485-p0t0-1-aNO, aluminium (incl. Global Calibration A-e1)
	max.	400		25	400	250	300	500		

**paper mill WWTP effluent**

		typical concentration ranges for this application							part number
		TSS [mg/l]	NO <sub>3</sub> -N [mg/l]	COD [mg/l]	CODf [mg/l]	UV254 [Abs/m]	UV254t [Abs/m]		
spectro::lyser™ UV-Vis (TSS, NO <sub>3</sub> , COD, CODf, UV254, UV254t)	min.	0	0	0	0	0	0	A1-002-485-p0t0-1-sNO, stainless steel (incl. Global Calibration A-q1)	
	max.	1000	10	350	350	750	1250		