



spectro::lyser® V3 ATEX for Wastewater

spectro::lyser® UV-Vis monitors depending on the application an individual selection of: TSS, TS, turbidity, color, TOC, DOC, BOD, COD, NO₃-N, NO₃, HS-, O₃, CLD, UV254, fingerprints, spectral alarms and temperature

- measuring principle: UV-Vis spectrometry over the total range (200-720 nm)
- ideal for industrial waste water, desalination and sea water
- web server on board - IoT enabled, no user software is needed to configure the probe
- 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
- long term stable and maintenance free in operation
- factory precalibrated, local multi-point calibration possible
- automatic cleaning with compressed air



up to 10 bar
operating pressure



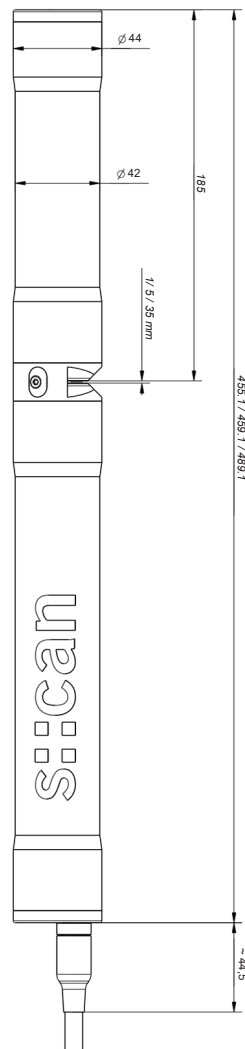
explosion proof
certification



advanced calibration
service

recommended accessories

part number	article name
D-330-XXX B-	con::cube V3
33-012 B-32-	con::nect V3
XXX B-44	s::can compressor
B-44-2	cleaning valve
F-140-V3	
F-150-V3	carrier s::can spectrometer V3 probe, 45°
S-11-XX-	carrier s::can spectrometer V3 probe, vertical attachment
MONI	moni::tool Software
V3-VALI	vali::tool - data validation software for spectrometer V3 probe





technical specification

measuring principle	UV-Vis spectrometry 200 - 720 nm
measuring principle detail	xenon flash lamp, pixel array detector
measurement interval	30 sec (configurable, depending on application)
automatic compensation instrument	real dual beam measurement for compensation and detailed diagnostics
automatic compensation cross sensitivities	turbidity / solids / organic substances
precalibrated ex-works	all parameters
accuracy standard solution (>1 mg/l)	NO ₃ -N: +/- 2% +1/OPL[mg/l]* COD-KHP: +/- 2% +10/OPL[mg/l]* (* OPL ... optical pathlength in mm)
access to raw signals	access to spectral information
reference standard	distilled water
onboard memory	8 GB
integrated temperature sensor	0 ... 50 °C
resolution temperature sensor	0.1 °C
integration via	con::cube V3 con::nect V3 con::lyte V5 (D-320-pro2) and adapter cable (C-32-V3) 11 ... 15 VDC
power supply	3 W
power consumption (typical)	60 mW
power consumption (sleep model)	20 W
power consumption (max.)	M12 plug, RS485, Ethernet
interface to s::can terminals	con::nect V3 incl. Modbus RTU, REST API, Modbus TCP/IP
interface to third party terminals	1 digital in/out
digital interface (for cleaning devices)	1 digital out Io::Tool browser software:
interface software	multipoint calibration, free formular (incl. logical operators, historic values), display of fingerprint and compensated fingerprint, unlimited parameter display
data transfer	SCP, SFTP, HTTPS

IoT capabilities	remote configuration
internal sensors (can be displayed as parameters)	supply voltage sensor, tilt sensor, rotation sensor
network connection	100Base-T Ethernet
cable length	1 m fixed cable (-010) or 7.5 m fixed cable (-075) or 15 m fixed cable (-150)
cable type	PU jacket
housing material	stainless steel 1.4404
window material	optical path length 5 and 1 mm: sapphire optical path length 35 mm: fused silica (UV-grade)
weight (min.)	3.6 kg (incl. 7.5 m cable)
dimensions (Ø x l)	optical path length 35 mm: 44 x 489.1 mm / 533.6 mm optical path length 5 mm: 44 x 459.1 mm / 503.6 mm optical path length 1 mm: 44 x 455.1 mm / 499.6 mm 0 ... 45 °C
operating temperature	0 ... 10 bar
operating pressure	submersed or in a flow cell
installation / mounting	3 m/s (max.)
flow velocity	30 Nm
mechanical stability	IP68
ingress protection class	media: compressed air
automatic cleaning	permissible pressure: 3 ... 6 bar -10 ... 65 °C
storage temperature	EN 60721-3
conformity - environmental testing	EN 61326-1
conformity - EMC	EN 50581
conformity - RoHS 2	TÜV-A 12ATEX0001X/02,
explosion proof certification	EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-28:2015 classification type: II 2 G Ex db op is IIC T6 Gb 1 years
standard guarantee	3 years
extended guarantee (optional)	

municipal WWTP influent & sewer

		parameter												part number
		TSS [mg/l]	color (app) [Hazen]	color (tru) [Hazen]	TOC [mg/l]	DOC [mg/l]	BOD [mg/l]	COD [mg/l]	COD f [mg/l]	NO ₃ -N [mg/l]	HS- [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	
spectro::lyser™ V3 min. (1 mm OPL, UV-Vis)max.		0 8000	0 23000	0 14000	0 3300	0 2600	0 5300	0 10000	0 5300	0 100	0 80	0 3300	0 0	SP3 -1- 01- E X-x x x
spectro::lyser™ V3 min. (5 mm OPL, UV-Vis)max.		0 1200	0 3500	0 2100	0 500	0 400	0 800	0 1500	0 800	0 16	0 12	0 500	2800 0 420	SP3 -1- 05 - E X-x x x

paper mill WWTP effluent

parameter								
		TSS [mg/l]	COD [mg/l]	COD f [mg/l]	NO ₃ -N [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	part number
spectro::lyser V3 ATEX (1 mm OPL, UV-Vis)	min.	0	0	0	0	0	[Abs/m]	SP3 -1- 01- E X-x x x
	max.	4000	5300	3300	100	3300	0	
spectro::lyser V3 ATEX (5 mm OPL, UV-Vis)	min.	0	0	0	0	0	2800	SP3 -1- 05 - E X-x x x
	max.	600	790	490	16	500	0 420	

brewery WWTP influent

		parameter						
		TSS [mg/l]	COD [mg/l]	COD f [mg/l]	NO ₃ -N [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	part number
spectro::lyser V3 ATEX (1 mm OPL, UV-Vis)	min.	0	0	0	0	0	[Abs/m]	SP3 -1- 01- E X-x x x
	max.	13000	60000	530 0 0	100	3300	0	
spectro::lyser V3 ATEX (5 mm OPL, UV-Vis)	min.	0	0	0	0	0	2800	SP3 -1- 05 - E X-x x x
	max.	2000	9000	7900	16	500	0 420	

dairy WWTP influent

parameter								
		TSS [mg/l]	COD [mg/l]	COD f [mg/l]	NO ₃ -N [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	part number
spectro::lyser V3 ATEX (1 mm OPL, UV-Vis)	min.	0	0	0	0	0	[Abs/m]	SP3 -1- 01- E X-x x x
	max.	8000	330 0 0	16000	210	3300	0 2800	

☎ 442 738 3918

✉ contacto@ingframex.com

🌐 www.ingframex.com