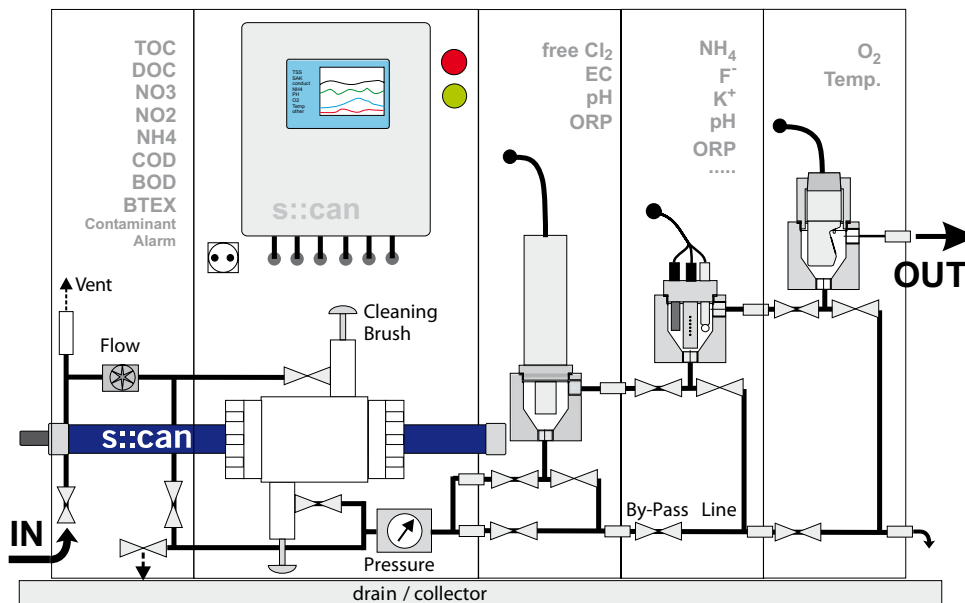


"The full range online"

Water Quality Monitoring Station

... water analysis - compact and easy like never before



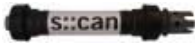
- BOD
- COD
- BTX
- TOC
- DOC
- NO₃
- NO₂
- NH₄
- K⁺
- Free Cl₂
- F⁻
- TSS
- Turbidity
- pH
- ORP
- EC
- O₂
- O₃
- H₂S
- AOC_{eq}
- Contaminant alarm

Built-in Sensors



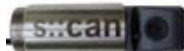
spectro::lyser

	UV sensor	UV-Vis sensor
Contamination alarm	yes	yes
Carbon sensor	yes	yes
	UV 254/280	UV 254/280
	TOC	TOC
	COD	COD
	-	BOD
N sensor	yes	yes
	NO ₃	NO ₃
	NO ₂	-
Hydrocarbon sensor	yes	yes
	benzene	-
	toluene	-
	xylene	-
	phenol	-
	-	BTX alarm
Colour sensor	no	yes
Turbidity	turbidity estimator	turbidity sensor
Measuring range	220 to 390 nm	220 to 720 nm
Accuracy	1% of reading	1% of reading
Response time	30 seconds	30 seconds
Cleaning	manual/brushes; automatic/air (optional)	
Maintenance	none, except initial matrix adjustment	



ammo::lyser, fluor::lyser

Measuring range, NH ₄ -N	0.1 to 1000 mg/L
Measuring range F ⁻	0.05 to 2.0 mg/L
Measuring range K ⁺	ion selective, 0.1 to 1000 mg/L
pH sensor	glass electrode, pH 2-12
Temperature sensor	-10°C up to 100°C
Accuracy	3% of reading, +/- 0.1 mg/L
Response time	30 seconds
Cleaning	automatic/air (optional)
Maintenance	none, except matrix adjustment



oxi::lyser

Measuring range	0 to 25 DO ppm
Temperature sensor	available 0-60°C
Accuracy	1% of reading, +/- 0.05 ppm
Response time	1 minute
Cleaning	automatic/air (optional)
Maintenance	maintenance free



free chlorine sensor

Several brands of sensors are available for measuring free chlorine. The standard model is the popular YSI 600DW-B sensor integrated via a digital protocol.

Measured variable	free Cl ₂
Measuring range	0 to 3 mg/L
Resolution	0.01 mg/L
Accuracy	+/- 15% of reading
pH compensation	optional



con::stat

This well proven industrial grade terminal is the electronic brain and heart of the station. One terminal can operate all types of s::can probes as well as other sensor and analyser models. A wide range of options exists for visualisation and interfaces, as well as real-time exchange of monitoring results with a central database.

Fields of Applications

Waste Water

Applications

- Industrial emission monitoring
- Industrial discharge quantification
- WWTP compliance monitoring
- WWTP influent monitoring
- Sewage monitoring stations

Parameters

- TSS/TS/MLSS
- UV-254/SAC
- Colour
- COD
- COD_dissolved
- BOD
- NO₃
- NO₂
- H₂S
- NH₄
- K⁺
- pH
- ORP
- O₂
- Conductivity
- Temperature
- Hydrocarbon alarm
- Industrial emission alarm



Environmental Water

Applications

- River monitoring stations
- River monitoring networks
- Lake monitoring pontoons
- Sea & brackish monitoring vessel
- Source water protection

Parameters

- FTU/NTU
- UV-254/SAC
- Colour
- TOC
- DOC
- NO₃
- NO₂
- NH₄
- pH
- K⁺
- ORP
- O₂
- BTX
- Conductivity
- Temperature
- Contaminant alarm



Drinking Water

Applications

- Water security stations
- Event detection
- Intake protection
- Distribution network monitoring
- Source to tap monitoring networks

Parameters

- FTU/NTU
- UV-254/SAC
- Colour
- TOC
- DOC
- NO₃
- NO₂
- NH₄
- F⁻
- K⁺
- Cl₂
- O₃
- BTX
- pH
- ORP
- O₂
- Conductivity
- Temperature
- Contaminant alarm



STANDARD MODULES

MODULE 1

con::stat or con::lyte + spectro::lyser or any other sensor

MODULE 2

ammo::lyser, fluor::lyser, other ISE, pH

MODULE 3

oxi::lyser

MODULE 4

condu::lyser, pH::lyser, redo::lyser

MODULE 5

free chlorine, pH, ORP, conductivity and other sensor options

OPTIONAL MODULES

MODULE "PREPARE"

Pre-treatment - sedimentation and filter options to remove unwanted solids and gases.

MODULE "PUMP"

A range of pumps for use in all kinds of water.

MODULE "SAMPLE"

For taking and storing a sample, triggered by thresholds or alarms on the con::stat.

MODULE "ZERO"

For automatic zeroing, triggered by the terminal.

MODULE "ALARM"

Warning light, siren, GSM modem alarm activated.

s::can Monitoring Station – Features

Main Features of the s::can Monitoring Station

Integrated

One terminal for all sensors and interfaces.

Most Comprehensive Contamination Warning System

In line with EPA Guidance on Planning for Contamination Warning System Deployment, May 2007.

Reduces complexity to an absolute minimum

One software, one user interface, one data format, one remote access tool for an unbelievable range of parameters.

Minimises the need for local infrastructure

No need anymore to build houses, chambers or containers. Just put your modules into a waterproof cabinet. Requires only 10% of the space of conventional analyser stations.

Plug & Measure

Just connect the local water pipe, switch on the power, and start to measure.

Modular

Select any modules / parameter combination you need. A solution for every budget. Simply add more modules whenever you need to.

Compact

The most compact station for analytical parameters in the world.

Flexible

Attach the modules on a flat wall, round the corner, put them in a cabinet or install them in a field enclosure.

Cost Efficient

No reagents. No replacement parts except membranes of the ISEs. Manual or automatic cleaning. Minimum maintenance hours.

Minimal Maintenance

The maintenance interval of a station is dependent on its weakest link. We just do not allow any weak link. Remote maintenance reduces field visits to a minimum. 1 visit/month is sufficient for many applications.

Bypass Line

Service any sensor without interrupting the flow.

Uniform Flow-Through Cells

Allows simple and fast ordering, exchange and maintenance of sensors.

Specifications of the s::can Monitoring Station

Module 1	31.5 x 15.8" (80 x 40 cm) ~ 7 kg/15.4 lbs
All other modules	31.5 x 7.9" (80 x 20 cm) ~ 3 kg/6.6 lbs
Water Connection	Waste Water ½" threaded, 0.5 to 8 bar; Clean Water ¼" threaded, 0.5 to 8 bar Connection pipe diameter ½" 2 pressure zones: full pressure for spectro:lyser to keep fouling at minimum, reduced pressure for all other sensors
Materials	pipe - PE, measuring cells - POM, valves - stainless steel and polyamide
Flow	> 500 ml/min min flow for Cl ₂ module; > 100 ml/min. minimum flow for all other modules Flow controller keeps flow constant. Rotameter flow indicator (optional no-flo-alarm)
Electrical	100 - 250 V; optional 12 V or 24 V; 100 W max.
Environment	5 to 40°C water temperature. No chemicals. No reagents.
Costs involved	Infrastructure costs: typically 10% of the more traditional stations (houses, containers). Purchase costs: please contact your local s::can dealer. Yearly consumables and replacement costs < 1,000 USD typical for a complete system. Yearly in-house maintenance < 50 hours typical for a complete system. Yearly external service < 2 visits typical for a complete system. Thus, yearly operational costs are 3,000–5,000 USD for a complete analytical measuring station.

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s::can
liquid monitoring networks

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