

pipe::scan

The pipe::scan is a sensor system for monitoring drinking water quality in pipes under pressure. It measures up to 10 parameters in one device: TOC, DOC, UV254, Turbidity, Color, UVT, Chlorine, pH/Redox, Conductivity, Temperature and Pressure. The water quality data can be sent to any central database via almost any protocol. Multiple pipe::scans are the ideal solution to monitor drinking water at any point in the network.



Certificate of Sanitary Conformity

- TOC
- DOC
- UV254
- Turbidity
- Color
- Chlorine
- pH/Redox
- Conductivity
- Temperature
- Pressure

i::scan
Multi-parameter spectrophotometer probe.
Parameters: FTU/NTU, UV254, UVT, Color, TOC, DOC

Enclosure
Additional security for sensors and operator.

Physical sensors
One chlori::lyser and two additional sensors (condu::lyser, ph::lyser or redo::lyser) can be installed.
Parameters: Conductivity, Free Chlorine, pH, Redox and Temperature

Optional autobrush for i::scan
Provides automatic brush cleaning for the i::scan.

Base unit
Flow cell for up to 4 sensors with retractable insertion nozzle, filter, sample valve, automatic bleeder valve, pressure sensor and flow sensor (optional).

Pipe saddle
2" pipe saddle for hot tap installation. Available for pipes from DN80 to DN600.

Nano-pump
For water flow even during periods of stagnation.



technical specification

available measurement parameters	turbidity (NTU/FTU), TOC, DOC, UV254, UVT, Colour, pH or ORP, conductivity, free chlorine, pressure, temperature	installation / mounting	on 2" Hawle pipe saddle (to be ordered separately)
minimal measurement interval	1 min	manual sampling option	ball valve for manual sampling IG1/4" EN10206-1
wetted materials	POM stainless steel fine brass EN12165 and EN12164	other operating limits	pipeline must be vented installation must be on top of pipe no direct sunlight
other material	depends on sensors	operating pH range	4 - 12 pH
precalibrated ex-works	all parameters	operating free chlorine range	0 - 2 mg/l
reference standard	distilled water	storage temperature limit	base unit -20 ... +60°C sensors 0 ... +45°C
integration via	con::cube	storage humidity limit	0 ... 95%
power supply	via con::cube	automatic cleaning	autobrush (for i::scan)
power consumption (typical)	14W	drinking water safety certificate	ACS (Attestation de conformité Sanitaire)
power consumption (max.)	35W	conformity - EMC	EN 61326-1
weight (min.)	approx. 8 kg	conformity - safety	EN 61010-1 RoHS
dimensions (w x h x l)	220 x 450 x 340 mm	protection class	IP67
operating temperature	0 (non-freezing) ... +45°C		
operating pressure	1 ... 10 bar		

i::scan for 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]	UVT10 [%]	color (app) [Hazen]	color (tru) [Hazen]	part number
i::scan_NTU/FTU	min.	0								Y01-1-d-000 / -075
	max.	800								
i::scan_NTU/FTU+Color	min.	0						0	0	Y02-1-d-000 / -075
	max.	800						300	200	
i::scan_NTU/FTU+UV254	min.	0			0	0	25			Y03-2-d-000 / -075
	max.	800			70	55	100			
i::scan_NTU/FTU+UV254+Color	min.	0			0	0		0	0	Y04-2-d-000 / -075
	max.	800			70	55		300	200	
i::scan_NTU/FTU+TOC_eq+UV254	min.	0	0	0	0					Y05-3-d-000 / -075
	max.	800	25	12	70					
i::scan_NTU/FTU+TOC_eq+UV254+Color	min.	0	0	0	0			0	0	Y06-3-d-000 / -075
	max.	800	25	12	70			300	200	

chlори::lyser (stainless steel version) for drinking water

		concentration ranges and sensor/probe type for this application			
		free chlorine [mg/l]	temperature [°C]		part number
chlори::lyser (FCl, temp)	min.	0	0		E-520-1-s-000
	max.	2	45		

pH::lyser for drinking water

		concentration ranges and sensor/probe type for this application			
		pH [pH]	temperature [°C]		part number
pH::lyser (pH, temp)	min.	4	0		E-514-2-000
	max.	10	45		

condu::lyser for drinking water

		concentration ranges and sensor/probe type for this application			
		conductivity [µS/cm]	temperature [°C]		part number
condu::lyser (conductivity, temp)	min.	0	0		E-511-2-000
	max.	5000	45		

redo::lyser for drinking water

		concentration ranges and sensor/probe type for this application			
		redox [mV]	temperature [°C]		part number
redo::lyser (ORP, temp)	min.	-500	0		E-513-2-000
	max.	500	45		