

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

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

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

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

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).

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



technical specification

measurement interval	1 min (minimal)	operating pressure	1 ... 10 bar
precalibrated ex-works	all parameters	installation / mounting	on 2" Hawle pipe saddle (to be ordered separately)
reference standard	distilled water	other operating limits	pipeline must be vented installation must be on top of pipe no direct sunlight
integration via	con::cube	pH range	4 ... 12
power supply	via con::cube	automatic cleaning	autobrush (for i::scan)
power consumption (typical)	14 W	storage temperature	0 ... 45 °C
power consumption (max.)	35 W	conformity - EMC	EN 61326-1
wetted materials	POM stainless steel fine brass EN12165 and EN12164	conformity - safety	EN 61010-1 RoHS
dimensions (width x height x depth)	220 x 450 x 340 mm	drinking water safety certificate	ACS (Attestation de conformité Sanitaire)
weight (min.)	approx. 8 kg	protection class (-000)	IP67
operating temperature	0 ... 40 °C		
storage humidity	0 ... 95 %		

i::scan for drinking water

		parameter								part number
		turbidity [NTU/FTU]	color (app) [Hazen]	color (tru) [Hazen]	TOC [mg/l]	DOC [mg/l]	UV254 [Abs/m]	UV254 f [Abs/m]	UVT10 [%]	
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		Y04-1-d-000 / -075
	max.	800	300	200			70	55		
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	300	200	25	12	70			

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

		parameter			part number
		temperature [°C]	free chlorine [mg/l]	total chlorine [mg/l]	
chlори::lyser (FCI)	min.	0	0		E-520-1-s-000
	max.	40	2		
chlори::lyser (TCI)	min.	0		0	E-520-1-s-000
	max.	40		2	

pH::lyser for drinking water

		parameter		part number
		temperature [°C]	pH [pH]	
pH::lyser (pH)	min.	0	4	E-514-2-000
	max.	40	10	

condu::lyser for drinking water

		parameter		part number
		temperature [°C]	conductivity [S/cm]	
condu::lyser (conductivity)	min.	0	0	E-511-2-000
	max.	40	5000	

pipe::scan versions

part number	article name
P-450-PS-SET-230	pipe::scan base unit: flow cell incl. adapter plate, nano pump, insertion nozzle, vent valve, enclosure, pipe::scan cable hub incl. 10 m connection cable to con::cube, con::cube V3 230 V incl. D-303LX, S-08-moni, S-11-basic-plc
P-450-PS-SET-230	pipe::scan base unit: flow cell incl. adapter plate, nano pump, insertion nozzle, vent valve, enclosure, pipe::scan cable hub incl. 10 m connection cable to con::cube, con::cube V3 230 V incl. D-303LX, S-08-moni, S-11-basic-plc
P-FTU	FTU with i::scan incl. Autobrush for pipe::scan
P-FTU-COL	FTU + COLOR with i::scan incl. Autobrush for pipe::scan
P-FTU-COL-UV254	FTU + COLOR + UV254 with i::scan incl. Autobrush for pipe::scan
P-FTU-COL-UV254-TOC	FTU + COLOR + UV254 + TOC with i::scan incl. Autobrush for pipe::scan
P-FTU-UV254	FTU + UV254 with i::scan incl. Autobrush for pipe::scan
P-FTU-UV254-TOC	FTU + UV254 + TOC with i::scan incl. Autobrush for pipe::scan
P-FCL	Free Chlorine sensor, 0-2 mg/l, pressure resistant
P-TCL	Total Chlorine sensor, 0-2 mg/l, pressure resistant
P-pH	pH sensor, pressure resistant
P-ORP	ORP sensor, pressure resistant
P-EC	Conductivity sensor, pressure resistant
P-P	Pressure sensor for pipe::scan F-450-PS-P incl. D-315-in-mA

recommended accessories

part number	article name
D-315-xxx	con::cube
S-11-xx-moni	moni::tool Software
F-160-SP-SET-DKxxx	Hawle shut off pipe saddle DK75 - DK315, incl. saddle blade (for PE and PVC pipes)
F-160-SP-SET-DNxxx	Hawle shut off pipe saddle DN80 - DK600, incl. saddle blade (for ductile iron pipes)
S-14-vali	vali::tool - s::can data validation software
S-15-ana	ana::tool - s::can event detection software



