

Technical Specifications

Measurement technology		pH electrode
Measurement principle		Potentiometry
Parameter		pH value, temperature
measuring range	pH	0...14 pH
	Temperature	0...+65 °C
resolution	pH	0.01 pH
	Temperature	0.1 °C
precision	pH	± 0,06 pH
	Temperature	± 0.5 °C
Intrinsic error	pH1	± 0.05 pH
	pH7	± 0.05 pH
	pH13	± 0.35 pH
Linearity measurement error		± 0.1 pH
Repeatability	pH1	± 0.1 pH
	pH7	± 0.05 pH
	pH13	± 0.1 pH
Output signal fluctuation	pH7	± 0.025 pH
	pH4	± 0.05 pH
Warm-up time		< 5 min
Drift	Short-term drift 24 h	≤ 0.03 pH
	Long-term drift 1 week	≤ 0.05 pH
10% time and 90% time	T10 ascending	< 2 s
	T10 falling	< 2 s
	T90 ascending	≤ 5 s
	T90 falling	≤ 5 s
Temperature compensation		Pt1000
Measurement interval		2 s
Housing material		PPS / PET / NBR
Dimensions (L x Ø)		~ 180 x 27 mm ~ 7.1" x 1.1"
Weight		110 g ~ 0.2 lbs
Interface		RS-485, Modbus RTU
Power consumption		0.2 W

Power supply	12...24 VDC ($\pm 10\%$)	
Connection	8-pin M12 plug	
Sensor cable	2 m and 10 m	
Required supervision	Typically ≤ 0.5 h/month	
Calibration / maintenance interval	Typically 4 weeks	
System compatibility	Modbus RTU	
Warranty	1 year (EU: 2 years) on electronics; wearing parts are excluded from the warranty	
Max. pressure	with fixed cable	3 bar ~ 43.5 psig
	in flow cell	1 bar, 2...4 L/min ~ 14.5 psig, 0.5 to 1 gpm
Protection type	IP68	NEMA 6P
Sample temperature	+2...+40 °C	~ +36 °F to +104 °F
Ambient temperature	-5...+55 °C	~ +23 °F to +131 °F
Storage temperature	0...+80 °C	~ +32 °F to +176 °F
Inflow velocity	0...3 m/second	~ 0...10 fps