

CROSS SMART SENSOR

DG7-TC: Total Chlorine Analyzing Sensor

Digital technology for optimized measures



Total Chlorine is defined as the total combined amount of Free Chlorine, Chloramine, Organic and Bound Chlorine in the sample. The DG7-TC is designed to monitor Total Chlorine in drinking water, rinse water, cooling water or other fresh water samples.

DG7-TC has two ranges to choose from: High Range 0.05 to 20 ppm Cl₂ and Low Range 0.005 to 2.000 ppm. The sensor significantly reduces pH dependence such that there is no need of PH compensation for most applications.

It usually incorporates a panel mounted acrylic flow cell with flow control device. The Delta-Phase GDC can get the digital signal of the sensor and provide displaying, data logging and control functions.

Features and Benefits

- Panel mounted system with flow control, simple installation.
- Plug and play design, easy setup and ready to use.
- Compliant with EPA Method 334.0
- Digital interface RS485 Modbus RTU
- Significant reduction of pH dependence.
- Fully compatible to 4 types of GDC with complete support of displaying, data logging and control.



Cross Smart Sensor

SPECIFICATIONS		
Measuring system	Membrane-covered , amperometric 3-electrode system with integrated electronic	
Range	(0.005 to 2.000/20.00)mg/l, ppm	
Accuracy	0.001mg/l (0.005~2) mg/l, ppm	
	0.01mg/l (0.05~20) mg/l, ppm	
Resolution	0.001mg/l	
Repeatability	±1%FS	
Temp. compensation	Automatically, by an integrated temperature sensor	
pH Range	pH 4 to 12, greatly reduced pH dependence (linear decrease at approx. 5% per unit increase in pH)	
Sample flow rate	Approx. 30L/h	
Run-in time	First start-up approx. 2 h	
Operate Pressure	Max. 0.5 bar, no pressure impulses and/or vibrations	
Operate Temp.	41 °F to 113 °F (5 to 45°C)	
Response Time	T90 approx. 2 min	
Zero Point Adjustment	Not necessary	
Slope Adjustment	At the device, by analytical determination of the chlorine concentration, DPD-4-method (DPD-1 +	
	DPD-3)	
Interferences	CIO ₂ : measured 100%	
	O ₃ : measured with a slope of approx. 130% (factor 1.3 in relation to the slope for chlorine)	
Material	Microporous hydrophilic membrane, PVC-U, stainless steel 1.4571	
Power Supply	24VDC, 40mA	
Digital Interface	Modbus RTU	
Spare Parts	Membrane cap: M48.1 Electrolyte: ECP1.3/GEL	
Dimensions	1" O.D. and 8.07" Length (O.D. 25.4mm × 205 mm)	

ORDER CODE

DG7-CD Chlorine Dioxide analyzing Sensor with panel and flow cell			
	Measuring Range		
	-H 0.005~2.000 mg/l, ppm -N 0.05~20.00 mg/l, ppm		
		-C10 10' (3 m) cable	
		-C20 20' (6 m) cable	
		-C30 30' (9 m) cable	
		Other length contact factory.	
DG7-CD	-H	-C30	

