



CROSS SMART SENSOR

DG7-TC: Total Chlorine 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 Cl₂. 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.



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SPECIFICATIONS					
Measuring system	Membrane-covered, amperometric 3-electrode system with integrated electronic.				
Range	0.005~2.000 mg/l, ppm; 0.05~20.00 mg/l, ppm				
Resolution	0.001 mg/l for (0.005~2.000 mg/l, ppm); 0.01 mg/l for (0.05~20.00 mg/l, ppm);				
Accuracy	< 2% F.S.				
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. 15-30 L/h				
Run-in time	First start-up approx. 2 h				
Operate Pressure	Typical 0.5 to 3 bar, no pressure impulses and/or vibrations				
Operate Temp.	41 °F to 113 °F (5 to 45°C)				
Response Time	T90 approx. 2 min				
Slope Adjustment	At the device, by analytical determination of the chlorine concentration				
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	Sensor: Microporous hydrophilic membrane, PVC, PEEK, 316SS; PMMA FLC and PVC panel.				
Power Supply	24VDC, 40mA				
Digital Interface	Modbus RTU				
Spare Parts	Replacement of the membrane cap typically once a year (depending on the water quality) Refill the electrolyte typically every 3 ~ 6 months				
Sensor: Dia. 1" (25.4 mm), Length: 8.07" (205 mm); Dimensions Flow cell: 3.54x4.72x2 inch or 90x120x50 mm (WxHxD) Panel: 16.54x13.78 inch or 420x350 mm (WxH)					

ORDER CODE

Specifications subject to change without notice.

DG7-TC Total Chlorine Sensor with flow cell and mounting panel						
	- -H	0.005~2.00ppm 0.05~20.00ppm				
		-C10 -C20 -C30	10' cable 20' cable 30' cable	Specify length up to 100ft (30m) in order.		
DG7-FC	-N	-C30				



DELTA-PHASE ELECTRONICS, INC.

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