

HYDROGUARD HG-TotalCl

Accurate control for Total Chlorine Applications

Customized Multi-Parameter Systems

The **HYDROGUARD HG-TotalCl** adapts to each sites unique needs by allowing any combination of measurements in a single system including: Total Cl, pH, Temperature, Turbidity, Conductivity and Flow. A complete, flexible solution to fit any application.

Reliable Wired or Wireless Communication

Wireless Communication allows for remote alarm monitoring and control, increasing safety and reducing site visits. The **HYDROGUARD HG-TotalCl** parameters and alarms can be viewed from any internet connection or even a mobile phone. Furthermore 4-20mA based indications and dry contact alarms enable extends connectivity options.

Applications

- Potable water
- Process water
- Waste water
- Pools

Reduced Total Cost of Ownership

Save Time and eliminate the need for manual testing and control of Total Chlorine levels.

Ability to control 2 chlorine dosing systems simultaneously allowing for back-up systems to be automatically activated ensuring constant operation and safety.

Proven Results

Based on HYDROGUARDs proven platform, the **HYDROGUARD HG-TotalCl** provides reliable measurement and control with integrated pH and temperature compensation of total chlorine levels.



- ➔ **Total Chlorine up to 10ppm**
- ➔ **Accurate and Reliable Measurements**
- ➔ **Automatic Temperature and pH Compensation**
- ➔ **Multiple Parameters in a Single System**
- ➔ **Simple, User-friendly Menus and Functions**
- ➔ **Meets IP-65 (NEMA 4) Standards**

Your Water Quality Partner



HYDROGUARD HG-TotalCl SPECIFICATIONS

MECHANICAL DATA	
Dimensions (controller) (W x H x D)	14" x 7" x 5" (340 x 220 x 120mm)
Cable entries	Pg 9 Cable Glands
Ingress protection	IP 65 (NEMA 4 equivalent)
Max. ambient temperature	15°F to 113°F (-10°C to 45°C)
Weight Approx.	11 lbs. (4.5kg)
ELECTRICAL CONNECTION	
Power supply	100-120VAC/1A 210-230VAC/0.5A; 50Hz/60Hz
Power consumption	Approx 60 VA
Power supply for RTC memory	3.6V Lithium Battery
DATA SERIAL OUTPUT SIGNAL OUTPUT	
RS 485	Standard
4-20mA	Optional
RELAYS	
CL (Chlorine) set point 1	250VAC/DC 4A Max
CL (Chlorine) set point 2	250VAC/DC 4A Max
pH 1	250VAC/DC 4A Max
Turbidity control* 1	250VAC/DC 4A Max
General Alarm	250VAC/DC 4A Max
Temperature control	250VAC/DC 4A Max
DISPLAY	
5.5" Large Graphic Monochrome Display	
Character LCD with background light alarms and status	
pH MEASUREMENT	
Measurement range	0-10
Sensor	Ceramic diaphragm and gel filling
Input impedance	0.5 . 10 ¹² Ω
Cl MEASUREMENTS	
Indicator	Total chlorine
Measurement Principle	Membrane covered, amperometric 3-electrodes system with potentiostatic circuit and integrated electronics
Working temperature	33.8°F to 113°F (1°C to 45°C)
Measuring range	0.05...10 ppm
Max. operating pressure	7.25 psi (0.5 bar)
Material	PVC-U, electro-polished stainless steel
pH range	4-10
Flow rate	30 ... 40 l/h

TEMPERATURE MEASUREMENT	
Sensor	PT-100
Measuring range	32°F to 122°F (0°C to 50°C)
FLOW MONITORING	
Sensor	Rotary flow switch
Output signal	Dry Contact
Inlet Pressure	14.5 psi (1 bar)
Outlet Pressure Close Cell	13 psi (0.9 bar)
pH VALUE CONTROL	
Control function	P or PI, or On/Off
Characteristics	Normal / Inverted
Relay function	Pulse Length proportional controller Pulse Frequency proportional controller
CHLORINE CONTROL #1	
Control function	PI, or On/Off
Proportional band	Yes
Relay function	Pulse Length proportional controller Pulse Frequency proportional controller
CHLORINE CONTROL #2	
Control function	On/Off
Proportional band	No
Integral action time	No
DATA LOGGER	
Memory	256K
Lines	1000
Recording interval	1-360 min
Event logger	Yes
Total relay on time	Yes
SECURITY	
Operation Password	Yes
Technician Password	Yes

* Optional Feature