HYDROGUARD HG-202

Accurate Free Chlorine, pH and Temperature Controller for Swimming Pools & SPA

Customized Multi-Parameter Systems

The HG-202 is the ideal solution for monitoring and control solution of free chlorine, pH, and temperature in demanding pool and SPA applications.

Versatile Chlorine Measurement & Control

With the versatility to accept two different amperometric chlorine probes, the HG-202 offers users the ability to accurately disinfect the pool by using a wide range of chemicals such as calcium/sodium hypochlorite disinfectants. Accuracy is assured via both pH and temperature compensation. Variety of safety features are assuring smooth and secure operation

Flexible Options

Beyond its powerful standard features, the HG-202 allows users to expand with the option for low-range turbidity, Flow meter and Redox. Flexible outputs also allows for analog 4-20 mA communication and interface

Wireless Communication

For managing pool conditions offsite with the HG-202, wireless GPRS/3G technology transfers data direct to your computer or cell phone, providing real time and out breaking information such as alarms and allowing you to manage and monitor your pool conditions anytime, anywhere.
It is as simple as plug and play.

Proven Results

The HG-202 improves upon HydroGuard's experience and tradition of supplying the most accurate and reliable water analysis equipment providing peace of mind to our customers around the world.

- **Multiple Parameters in a Single System**
  - **Free Chlorine**
  - **pH**
  - **Temperature**
- **Optional Parameters**
  - **Turbidity (NTU)**
  - **Redox (ORP)**
  - **Flow Meter**
  - **Temperature Control**
  - **Wireless Communication**
- **Simple, User-friendly Menus and Functions in 8 Languages**
- **Meets IP-65 (NEMA 4) Standards**

Your Water Quality Partner

HYDROGUARD HG-202

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
DATA SERIAL OUTPUT SIGNAL OUTPUT	
RS 485	Standard
4-20mA	Optional (Indication)
RELAYS	
CL (Chlorine) set point 1	250VAC/DC 4A Max
CL (Chlorine) set point 2	250VAC/DC 4A Max
pH	250VAC/DC 4A Max
Turbidity control* 1	250VAC/DC 4A Max
General Alarm	250VAC/DC 4A Max
Temperature control	250VAC/DC 4A Max
DISPLAY	
2 line 24 character LCD with background light	
7 Segments numeric LED Display x 2 units	
pH MEASUREMENT	
Display range	4-10
Sensor	Ceramic diaphragm and gel filling
Input impedance	0.5 . $10^{12}\Omega$
CL MEASUREMENTs	
Indicator	Free Chlorine
Measurement Principle	passive-operated sensor with gold Cathode and silver/Silver chloride anode
Working temperature	41°F to 113°F (5°C to 45°C)
Measuring range	0.05 … 10 ppm
Max. operating pressure	7.25 psi (0.5 bar)
pH range	4-10
Flow rate	30 …40l/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	15.5 psi (1 bar)
Outlet Pressure Close Cell	13.0 (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