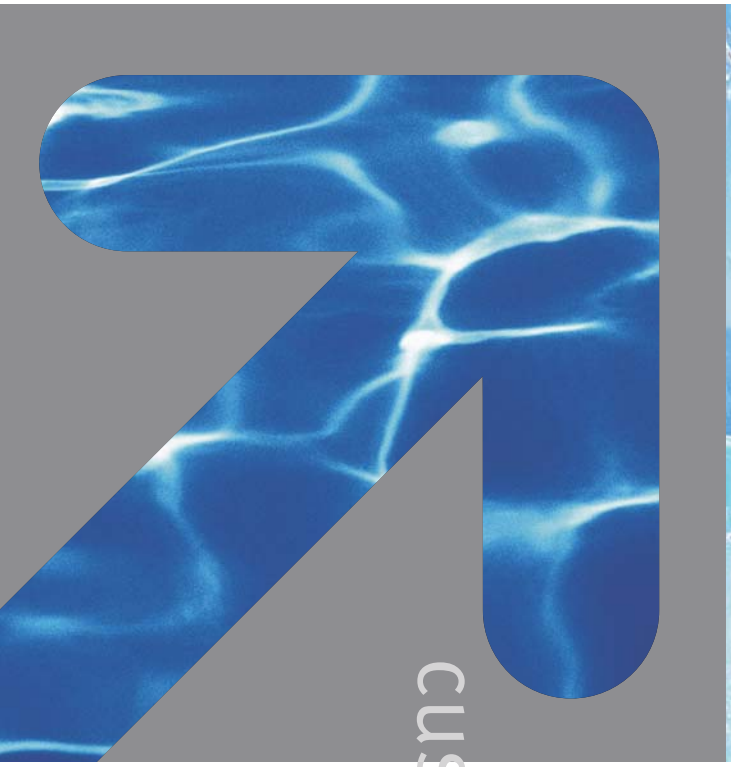
HG-302 WATER QUALITY CONTROLLER

Where water meets innovation

The ultimate solution for managing and monitoring pool conditions, in real time, anywhere

Blue I
Water Technologies

PEACE OF MIND THROUGH RELIABLE, INNOVATIVE PRODUCTS, SIMPLE OPERATION AND LONG-TERM COST SAVINGS



customized solution
consistently accurate
cost effectiveness
reliability

Blue I Water Technologies has developed the HydroGuard line of products that provide innovative, automated, reliable pool maintenance that is highly responsive, accurate and simple to use. So simple, in fact, that our customers forget it's there.

And that's just what we expect.

HG-302 WATER QUALITY CONTROLLER

The flexible solution for customers who appreciate the importance of innovative, reliable water management systems for the long-term

Customized systems

The HG-302 adapts to customers' changing needs by offering up to eight parameters, including free chlorine, pH, ORP (Redox) and temperature control as standard control features and flow, conductivity, turbidity and total chlorine as optional modules.

Consistently accurate

The Colormetric DPD method together with Blue I's advanced innovative technology makes the HG-302 exceptionally accurate and reliable, requiring calibration just twice a year.

Cost effective solution

The HG-302 provides remarkably efficient operation. Chemical reagents last up to three times as long as competing systems and Blue I's Intelligent Readings technique automatically regulates the system according to the changing pool environment. Overall, the HG-302 offers the most cost-effective operating solution.

Simple operation

Adjusting the pool conditions with the HG-302 is quick and easy. Using the highly intuitive control panel, detailed adjustments are made in a matter of seconds.

Reliable remote communications

For managing pool conditions offsite with the HG-302, wireless GPRS technology transfers data direct to your computer or cell phone, providing real time information and allowing you to manage and monitor your pool conditions anytime, anywhere. It is a simple as plug and play.

Proven results

Around the world, the HG-302 provides hundreds of customers' peace of mind through reliability, innovation, simple operation, and long-term cost savings. For customer references please contact us.

- LEADER IN ONLINE COLORMETRIC DPD TECHNOLOGY
- UP TO EIGHT PARAMETERS IN ONE UNIT
- CALIBRATION JUST TWICE A YEAR
- FLEXIBLE SYSTEM ADAPTS TO CUSTOMER NEEDS
- HIGHLY RESILIENT CONTROLLER-MEETS THE IP65 / NEMA 4 STANDARDS
- MONITORS REMOTELY USING SIMPLE & RELIABLE GPRS/WEB TECHNOLOGY

HG-302

Technical Data HydroGuard HG-302

MECHANICAL DATA	
Dimensions (controller)	26" x 13" x 5.5" (W x H x D) 668mm x 332mm x 140mm
Dimensions (mounting board)	31.5" x 21.5" x 6" (W x H x D) 800mm x 546mm x 152mm
Cable entries	Pg 9 Cable Glands
Ingress protection	IP 65 (NEMA 4 equivalent)
Max. permissible ambient temperature	15°F to 113°F (-10°C to 45°C)
Weight	Approx. 20 lbs. (9kg)

ELECTRICAL CONNECTION	
Power supply	210-230VAC/0.5A; 110-115VAC/1A 50Hz/60Hz
Power consumption	Approx 80 VA
Power supply for RTC Memory	3.6V Lithium Battery

DATA SERIAL OUTPUT SIGNAL OUTPUT	
RS 485	Standard
4-20ma	optional

RELAYS	
Chlorine set point 1	110-230V 4A Max
Chlorine set point 2	110-230V 4A Max
pH	110-230V 4A Max
Turbidity control*	110-230V 4A Max
General Alarm	110-230V 4A Max
Temperature control	110-230V 4A Max

DISPLAY	
Measured value displays	Chlorine, pH, ORP, Temperature, Total chlorine*, Turbidity* Conductivity*, Flow*
Function indicator	Auto, off/on mode for Chlorine and pH and dosing indication. Red and Green LEDs
2 line 24 character LCD with background light	For secondary parameters, program alarms and status
2 X 7 Segment Red display 3 digits	For Chlorine and pH

pH MEASUREMENT	
Display range	4-10
Sensor	Ceramic diaphragm and gel filling
Calibration	One Point Calibration
Input impedance	0.5 . $10^{12}\Omega$

ORP (REDOX) MEASUREMENT	
Display range	0-1000mv
Sensor	Ceramic diaphragm and gel filling
Calibration	One Point Calibration
Input impedance	0.5 . $10^{12}\Omega$

CHLORINE MEASUREMENT	
Sensor	Colorimetric Multi Spectrum sensor
LED	528/565nm
Cell cleaning	Automatic self cleaning mechanism (patent Pending)
Mixing Technology	Inner solenoid activated active mixer
Display range	0-10ppm

CHLORINE MEASUREMENT	
Reagent containers	500 mL
Reagent type	DPD 1
Reagent use/sample	0.033 mL
Measuring interval	2-15 minutes using the Adaptive measurement™ method.
Reagent replacement interval	1-2 month
Reagent Shelf life	1 year unmixed, 2 months mixed

TEMPERATURE MEASUREMENT	
Sensor	PT-100
Measuring range	32 to 158°F (0 to 70°C)

FLOW MONITORING	
Sensor	Level Switch
Output signal	Dry Contact
Inlet Pressure	14.5-22 psi(1-1.5 bar)
Outlet Pressure open Cell	Gravity
Outlet Pressure Close Cell	1 BAR(14.5 psi)
Flow Rate closed cell	60 LPH @1 BAR(16 GPH @ 14.5psi)
Flow Rate colorimetric cell	3-12 LPH @1 BAR(0.75-36 GPH @ 14.5psi)

pH VALUE CONTROL	
Control function	On/Off P or PI
Characteristics	Normal / Inverted
Set value function	Pulse Length proportional controller Pulse Frequency proportional controller

ORP (REDOX) VALUE CONTROL	
Control Function	High Alarm as chlorine override

CHLORINE CONTROL #1	
Control function	On/Off or PI
Proportional band	yes
Integral action time	Limited 4 step integral
Set value 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

ABOUT BLUE I WATER TECHNOLOGIES

Blue I Water Technologies develops, designs, manufactures and markets advanced state-of-the-art total water quality management systems. The company sells its product range through partnerships and distribution agreements in the US, Europe and the Far East. Blue I's water quality management solutions are already ensuring hundreds of customers peace of mind through reliable, innovative products, simple operation and long-term cost savings.

Authorized distributor