

# HYDROGUARD

## 302



**BLUE i**  
TECHNOLOGIES

## Accurate, Reliable, and Low Maintenance Multi-parameter Analyzer for Water Analysis

Analyzer for measuring free and/or total residual chlorine in water.

HG302 utilizes the proven colorimetric DPD (N, N-diethyl-p-phenylenediamine) chemistry, which is the most accurate and reliable method for measuring chlorine in water.



- Outstanding performance and accuracy
- 0-10 ppm wide chlorine measurement range
- Low reagent use and customized cycle time (up to 2 months at 5 min. cycle time)
- Self-cleaning mechanism of the colorimetric photo-cell
- Each analyzer can measure up to 6 parameters: Free and/or Total Chlorine, Turbidity, pH, Temp and ORP

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MECHANICAL DATA		pH MEASUREMENT	
Dimensions (controller)	668 x 332 x 140mm 26" x 13" x 5.5" (W x H x D)	Measurement Range	4-10
Dimensions (mounting board)	800 x 550 x 123mm	Sensor	Ceramic diaphragm and gel filling
	31" x 21" x 4" (W x H x D)	Calibration	One point Calibration
Cable entries	Pg 9 Cable Glands	ORP (REDOX) MEASUREMENT	
Max. ambient temperature	0°C to 50°C (32°F to 122°F)	Measurement range	0-1000mv
Weight approx.	11 kg (24 lbs)	Sensor	Ceramic diaphragm and gel filling
ELECTRICAL CONNECTION		Calibration	One point calibration
Power supply	100-115 VAC; 210-230 VAC; 50Hz/60Hz	TEMPERATURE MEASUREMENT	
Power consumption	Approx. 80 VA	Sensor	PT-100
Power supply for RTC	3.6V lithium battery	Measuring range	0°C to 50°C (32°F to 122°F)
DATA SERIAL OUTPUT / SIGNAL OUTPUT		FLOW MONITORING	
RS 485	Standard half-duplex	Sensor	Rotary switch
4-20ma	optional	Output signal	Dry contact
RELAYS		Inlet pressure	0.3 - 1bar
Chlorine set point 1	110-230V 4A Max	Outlet pressure open cell	Gravity
Chlorine set point 2	110-230V 4A Max	Outlet pressure close cell	up to 1bar (14.5 psi)
pH	110-230V 4A Max	Flow rate close	60 LPH @ 1bar (16 GPH @ 14.5 psi)
Turbidity control*	110-230V 4A Max	Flow rate colorimetric cell	3-12 LPH @ 1bar (0.75-36 GPH @ 14.5 psi)
General alarm	110-230V 4A Max	pH VALUE CONTROL	
Temperature control	110-230V 4A Max	Control function	Proportional or On/Off
DISPLAY		Characteristics	Normal / Inverted
Measured value displays	Chlorine, pH, ORP, Temperature, Flow* Total Chlorine*, Turbidity*, Conductivity	Relay function	Pulse length proportional controller
			Pulse frequency proportional controller
Function indicator	Auto, off/on mode for chlorine and pH and dosing indication. Red and Green LEDs	CHLORINE CONTROL #1	
2 line 24 character LCD with background light	For secondary parameters, program alarms and status	Control function	Proportional or On/Off
2 x 7 segment red display 3 digits	For chlorine and pH	Proportional band	Yes
CHLORINE MEASUREMENT		Relay function	Pulse length proportional controller
Sensor	Colorimetric multi-spectrum sensor		Pulse frequency proportional controller
LED	528/565 nm	CHLORINE CONTROL #2	
Cell cleaning	Automatic self-cleaning mechanism (patent)	Control function	On/Off
Mixing technology	Inner solenoid activated active mixer	Proportional band	No
Measurement range	0-10ppm	Integral action time	No
Reagent containers	500 ml	DATA LOGGER	
Reagent type	DPD 1	Memory	256 Kbit
Reagent use/sample	0.033 ml	Lines	1000
Measuring interval	2-5 minutes using the Adaptive measurement™	Recording interval	1-360 min
Reagent replacement interval	1-2 month	Event logger	Yes
Reagent shelf life	1 years unmixed, 2 months mixed	Total relay on time	Yes
		SECURITY	
		Operation password	Yes
		Technician password	Yes