



alpha-pH2000 Wall Mount/Panel Mount pH/ORP Analyzer



Product Features

- ▼ Built-In Programmable for On/Off, Proportional, or PI (Proportional integral control) - ideal for most demanding precision process control applications
- ▼ User-Customization through Advanced Setup Menu offers flexibility in matching the controller's functions to suit individual's specific requirement
- ▼ Automatic Calibration with Auto-Buffer Recognition eliminates mistakes during calibration
- ▼ Symmetrical Mode Operation eliminates electronic noise problems when used with solution ground
- ▼ Backlit Display offers reading in low-light conditions
- ▼ Universal Power Supply Input from 85 to 250 VAC/DC allows use at multiple sites and withstands voltage fluctuations
- ▼ Rugged NEMA 4X housing protects controller from the elements and dirty industrial applications
- ▼ Two Level Password Protection prevents unauthorized tampering with settings
- ▼ 0 to 2000 Second Time Delay Adjustment on control and alarm delays
- ▼ Hold Relay for use with float switches/flow switches and other controllers as a failsafe function
- ▼ Two Galvanically Isolated Scaleable 0-20/4-20 mA Outputs for pH/ORP and temperature
- ▼ Wash Contact Relay controls electrodes cleaning systems at desired duration and frequency
- ▼ Choice of Glass or Antimony Electrode for general purpose or hydrofluoric acid applications
- ▼ Adjustable Hysteresis (Dead Band) prevents rapid contact switching near set point
- ▼ Non-Volatile Memory retains all stored parameters and calibration data even if power fails
- ▼ Large Dual Display shows pH (or ORP) with temperature simultaneously - features clear multiple icons, set points, and status messages
- ▼ Choice of Temperature Sensor Pt100/Pt1000 with 2-wire or 3-wire temperature input selection
- ▼ Easy Installation and Wiring with detachable plug-in connectors
- ▼ Panel-mounted version is also available



Applications

General: Useful for any batch or on-line type application that requires accurate pH or ORP control.

Water Purification/Treatment: Use for batch and on-line control of incoming process water, rinse water treatment, recirculating system and waste water treatment.

Industrial: Ideal for chemical processing, food processing. aquarium, pharmaceutical, hydroponics and waste control industries.

Regulatory: Hook to recorder to document data for regulatory compliance.

Specifications

Product Specification	Description
pH Range	-2.00 to 16.00 pH
Resolution & Accuracy	0.01 pH & ± 0.01 pH
mV Range	-1000 to 1000 mV / 0 to 100% (for -100 to 100 mV)
Resolution & Accuracy	1 mV / 0.1% & ± 1 mV / $\pm 0.2\%$
Temperature Range	-10.0 to 110 °C (14.0 to 230.0 °F)
Resolution & Relative Accuracy	0.1 °C / °F & ± 0.5 °C / ± 1.0 °F
Temperature Sensor	Pt100/ Pt1000 (jumper selectable); 2 or 3 wire
Temperature Compensation	Auto / Manual (Reference at 25 °C)
Set Point and Controller Functions	
Integral Time	0 to 999.9 minutes
Switching pH Hysteresis	0.1 to 1 pH
Function (Switchable)	P/PI control (Pulse Length / Pulse Frequency); Limit Control; Off
Adjustable Period with Pulse Length Controller	0.5 to 20 seconds
Adjustable Period with Pulse Frequency Controller	60 to 120 pulses/min
Pickup / Dropout Delay	0 to 2000 seconds
Wash Cycle	0.1 to 200.0 hours
Wash Duration	1 to 2000 seconds
Contact Outputs, Controller	1 SPDT, 3 SPST relays



Switching Voltage / Current / Power	Max 250 VAC / Max 3A / Max 600VA	
Alarm Functions		
Function (Switchable)	Latching / pulse	
Pickup Delay	0 to 2000 seconds	
Display		
LCD	UV coat, backlit 14 segments display with symbols for status information	
Backlight	On/Off selectable with four levels of brightness control	
Electromagnetic Compliance (EMC) Specifications		
Emitted Interference	According to EN 61326	
Immunity to Interference	According to EN 61326	
Environmental Conditions		
Ambient Temperature	0 to 40 °C	
Operating Range		
Maximum Relative Humidity	80% up to 31 °C decreasing linearly to 50% at 40 °C	
Power Supply		
Input	80 to 250 VAC/DC 50/60 Hz Approx. 10 VA	
Main Fuse	250 mA, Anti-surge, S504 BUSSMAN	
Pollution Degree	2	
Transient Overvoltage Category	II	
Electrical Data and Connections		
Transmitter Function	Two 0/4 to 20 mA scalable outputs for pH/ORP and temperature, galvanically isolated	
CU 22 Function	22 mA current output	
Isolated Output Voltage	+12V ±0.5 V (Max 50 mA)	
Hold Function Switch	To freeze output current and deactivate control relays	
Load	Max 600 W	
pH Input	BNC (10 ¹² impedance); Asymmetrical/ Symmetrical	
Connection Terminal (Wall Mount)	3-pin, 8-pin, 9-pin and 13-pin terminal, detachable blocks	
Connection Terminal (Panel Mount)	3-pin, 9-pin and 19-pin terminal, detachable blocks	
Mechanical Specifications		
Dimensions (W x H x D)	Wall-mount	144 x 144 x 110 mm
	Panel-mount	96 X 96 X 175 mm
Weight	Wall-mount	745g (Unit) / 1100g (Packed)
	Panel-mount	950g (Unit) / 1100g (Packed)



Environmental Rating	Wall-mount	IP66 (NEMA 4X)
	Panel-mount	IP54 (front panel)