

## αpha-pH2000D Wall-Mount Differential pH/ORP Controller

This advanced controller features differential pH measurement techniques, reducing the chance of reference electrode fouling. Replaceable reference solutions and salt bridges increase sensor life in harsh applications.

- **Programmable for On/Off, Proportional, or Proportional Integral (PI) Control**
- **User-Customization** offers flexibility in matching the controller's functions to suit individual's specific requirements
- **Automatic Calibration with Auto-Buffer Recognition** eliminates mistakes during calibration
- **Symmetrical Mode Operation** eliminates electronic noise problems when used with solution ground
- **Backlit Display** for easy 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 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/flow switches and other controllers as a fail-safe function
- **Two Galvanically Isolated, Scaleable 0/4 to 20 mA Outputs** for pH/ORP and temperature
- **Wash Contact Relay** provides duration and frequency controls for cleaning systems
- **Adjustable Hysteresis (Dead Band)** prevents rapid contact switching near set point
- **Nonvolatile 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
- **Easy Installation and Wiring** with detachable plug-in connectors



### Ordering Information

Description	Order number	Eutech model number
αpha-pH2000D differential controller	EA-56715-20	EC-pHCTP2000D
Differential pH electrode*	EA-56715-50	EC-FP21A1A2
Differential ORP electrode*	EA-56715-60	EC-FR21A1A2

**Note:** Unit is packed with instrument and side thread rods/brackets for mounting; does not include power cord, electrodes, or temperature probe.

\*For complete information on differential electrodes, see page 5.

### Specifications

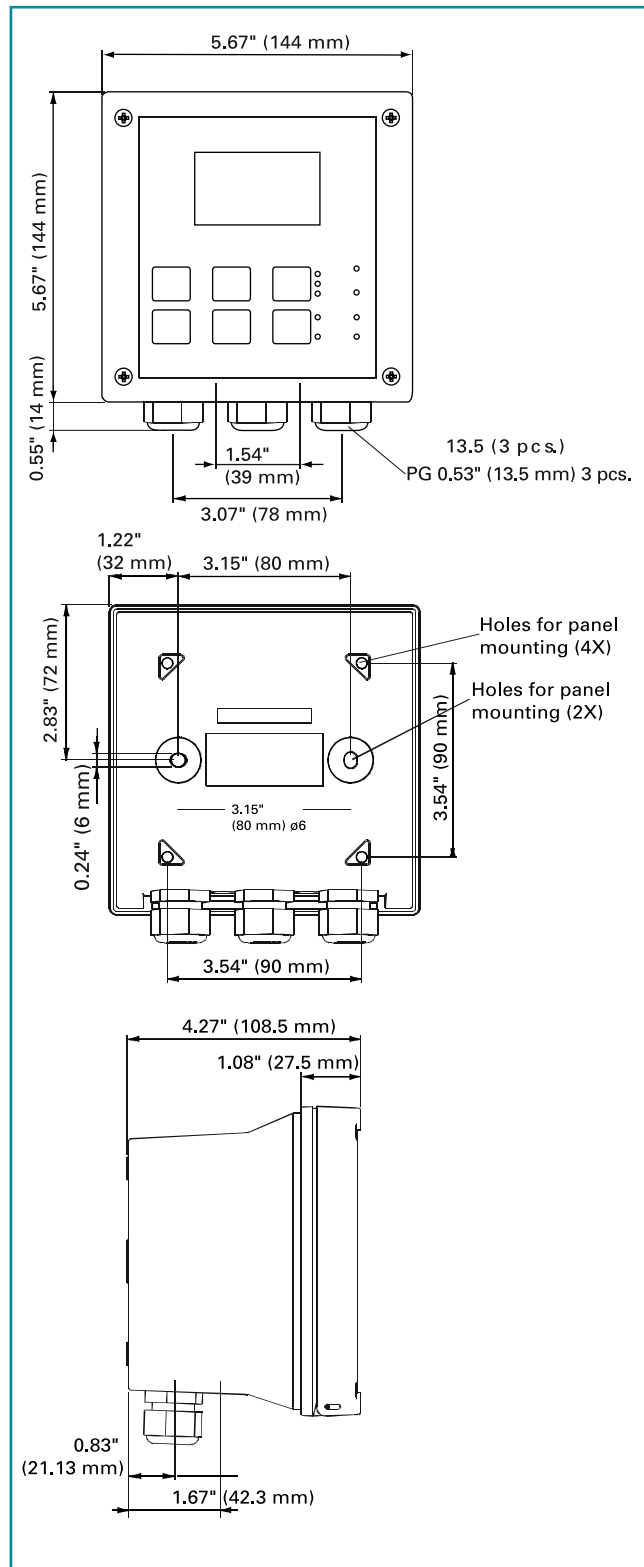
pH range	-2.00 to 16.00 pH
Resolution and Accuracy	0.01 pH and ±0.01 pH
pH buffer options	pH 1.01, 4.01, 6.86, 7.00, 9.00, 9.18, 10.01
No. of pH calibration points	Up to 2 points
ORP range (% or mV)	0 to 100%; -2000 to +2000 mV
Resolution and Accuracy	0.1% full-scale or 1 mV, and ±2 mV
Temperature range	-9.9 to 125.0°C (15.0 to 257.0°F)
Resolution and Accuracy	0.1°C (0.1°F) and ±0.5 °C (0.9°F)
Sensor (for ATC)	300 Ω NTC
Type of controller setting	Off (monitoring); proportional (pulse length or pulse frequency); proportional integral (PI)
Pickup/dropout delay	0 to 2000 seconds
Electrode type selection	Differential pH
Signal input	Symmetrical
Signal output range	Scaleable (pH 1 to 14)
No. of relays	2 SPDT; 1 alarm; 1 wash
Maximum voltage	250 VAC
Maximum current	3A
High/low hysteresis band	0.1 to 1.0 pH; 10 to 100 mV
Contact set points	Low/low; low/high; high/low; high/high (selectable)
Wash cycle/duration	0.1 to 199.9 hrs and 1 to 1999 secs
Power	80 to 250 VAC, 48 to 62 Hz or DC
Dimensions	½ DIN, 5.67" x 5.67" (144 x 144 mm)

TECH  
INFO

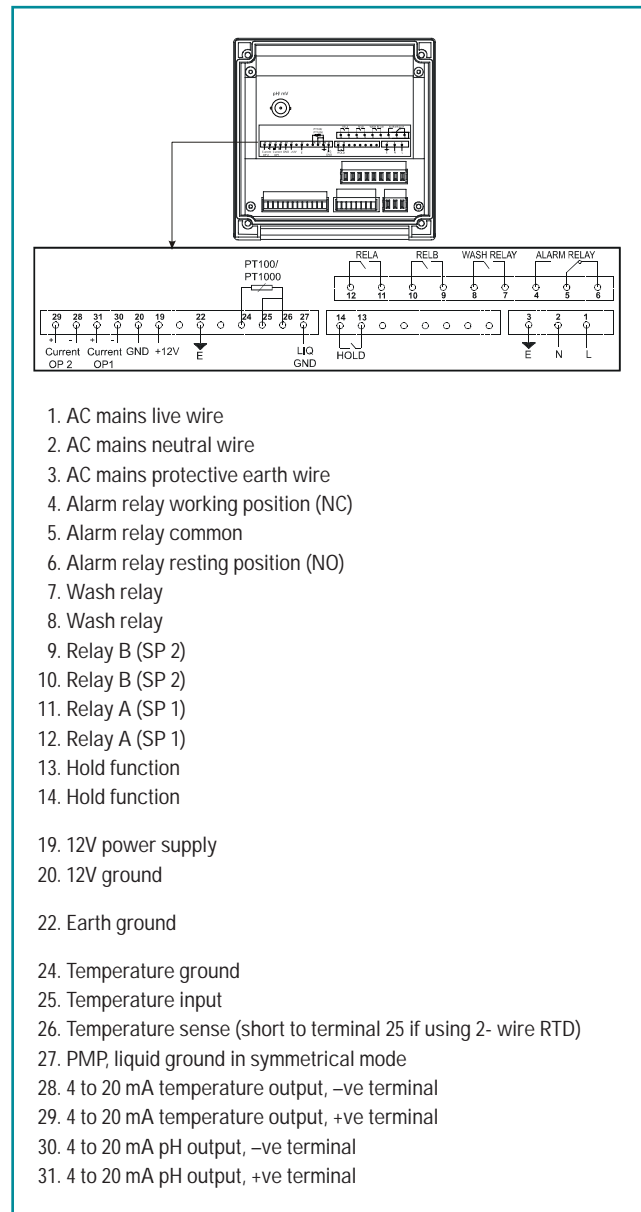
For a full description on the technology of differential measurement, see page 5.

## Installation

### Mounting



### Wiring



**TECH  
INFO**

For technical information on pH measurement and control, see pages 4 and 38 to 48.