



pH/ORP Transmitters

PHTX-271 Series



- ✓ Display Temperature in °C or °F
 - ✓ Hold and Simulate Functions
 - ✓ Integral or Remote Mounting
 - ✓ Open Collector or SPDT Relay Output
 - ✓ 4 to 20 mA Output Standard
 - ✓ Dual Output Option Allows Temperature and pH Signal Transmission
 - ✓ 2 x 16 Character Dot Matrix LCD
 - ✓ Chemical Resistant Enclosure and Self-Healing Window
 - ✓ Large Pushbuttons
 - ✓ Clearly Marked Terminal Labels
- Applications:**
- ✓ Neutralization Systems
 - ✓ Heavy Metals Recovery
 - ✓ Plating Control
 - ✓ Scrubber Control
 - ✓ Environmental Study
 - ✓ Water Treatment
 - ✓ Water Quality Monitoring
 - ✓ Waste Treatment
 - ✓ Disinfecting

The PHTX-271 Series Transmitter is designed for broad application and ease of setup and use. The unit auto-configures for either pH or ORP use when connected to recommended OMEGA® pH or ORP sensors. Multiple mounting options allow for installation best suited to your particular application. The automated "easy-cal" menu features automatic buffer recognition for mistake proof pH or ORP sensor calibrations. Two-line LCD provides sensor diagnostic information for ease in system maintenance.

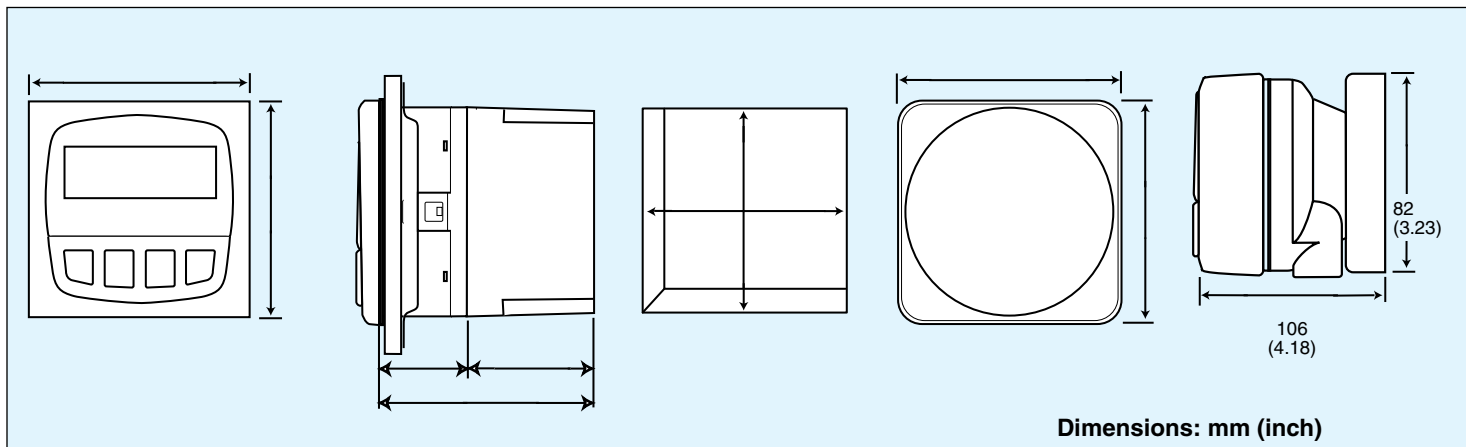


PHTX-271-2P shown larger than actual size.

Specifications

Accuracy: ±0.03 pH; ±2 mV ORP
pH Range: 0 to 14 pH
Temperature Range: -25 to 120°C (-13 to 248°F); 3K Balco
ORP Range: -2000 to +2000 mV, isolated (10 kΩ ID resistance T+, T-)
Current Output: 4 to 20 mA, isolated, passive, fully adjustable and reversible
Loop Impedance: 50 Ω maximum @ 12V; 325 Ω maximum @ 18V; 600 Ω maximum @ 24V
Update Rate: 0.5 sec
Accuracy: ±0.03 mA @ 25°C, 24V
Relay Output: Mechanical SPDT; Hi, Lo, Pulse, Off
Maximum Voltage Rating: 5 A @ 30 Vdc or 5 A @ 250 Vac, resistive
Hysteresis: User-adjustable, 400 pulses/minimum maximum
Open-Collector Output: Hi, Lo, Pulse, Off;
Type/Rating: Optically isolated, 50 mA maximum, sink, 30 Vdc maximum pull-up voltage
Hysteresis: User-adjustable, 400 pulses/minimum maximum

Operating Ambient: -10 to 70°C (14 to 158°F); 0 to 95% RH, non-condensing
Storage Temperature: -15 to 80°C (5 to 176°F)
Display: Alphanumeric 2 x 16 LCD; User selectable contrast, 5 levels
Enclosure Rating: NEMA 4X (IP65) front
Keypad: Sealed 4-key silicone rubber
Display Window: Polyurethane coated polycarbonate
Power: 12 to 24 Vdc ±5%, regulated
Max Current: 21 mA maximum for PHTX-271-1, 220 mA maximum for PHTX-271-2, 60 mA maximum for PHTX-271-3
Dimensions: 96 H x 96 W x 97 mm D (3.780 x 3.780 x 3.819")
Panel Cutout: 92 mm² (3.622 in²)
Shipping Weight: 0.6 kg (1.3 lb)



All panel mount transmitters PHTX-271-XP include a mounting bracket and gasket for a NEMA-4X (IP65) watertight panel installation. Panel mount transmitters fit into a standard 1/4 DIN panel cutout. The Universal Mount Kit FP90UM can be ordered separately and includes a conduit base, locking ring, and universal adapter for mounting the transmitter on a pipe wall or other stationary surface.

To Order			
Model No.	Description	Mounting	Output(s)
PHTX-271-1	pH/ORP transmitter	Field mount*	Open collector output
PHTX-271-2	pH/ORP transmitter	Field mount*	Dual relays
PHTX-271-1P	pH/ORP transmitter	Panel mount	Open collector output
PHTX-271-2P	pH/ORP transmitter	Panel mount	Dual relays

* Field mount transmitters require **FP90UM** universal mounting kit.

Pre-Amplifier and Sensors	
Model No.	Description
PH-2720-PA	Pre-amplifier with 4.5 m (15') cable, 3/4 FNPT
PHE-3271	Flat style pH electrode with ATC
PHE-3271-HF	Flat style pH electrode with ATC, HF resistant
PHE-2716	Bulb style pH electrode with ATC
PHE-2716-D1	Bulb style pH electrode with ATC, deionized water
ORE-2715	Flat style ORP sensor
ORE-2717	Bulb style ORP sensor

Accessories

Model No.	Description
FP90UM	Universal mounting kit
FP90-4X	NEMA 4X (IP65) rear cover (panel mount)
PH-31542-TC	Threaded cap for in-line installation 1 1/4 NPT
PHA-4	4.00 pH buffer solution 500 mL (1 pt) bottle
PHA-7	7.00 pH buffer solution 500 mL (1 pt) bottle
PHA-10	10.00 pH buffer solution 500 mL (1 pt) bottle
PSS-D12B	115 Vac to 12/24 Vdc, 240 mA power supply

Comes complete with operator's manual.

Ordering Examples: PHTX-271-1P, pH/ORP transmitter panel mount, PHE-3271 flat style pH electrode, PH-2720-PA pre-amplifier with 4.5 m (15') cable, PHA-4 pH 4 buffer solution, PHA-7 pH 7 buffer solution.

PHTX-271-1, pH/ORP transmitter field mount, FP90UM universal mounting kit, PHE-3271 flat style pH electrode, PH-2720-PA pre-amplifier with 4.5 m (15') cable, PHA-7 pH 7 buffer solution.

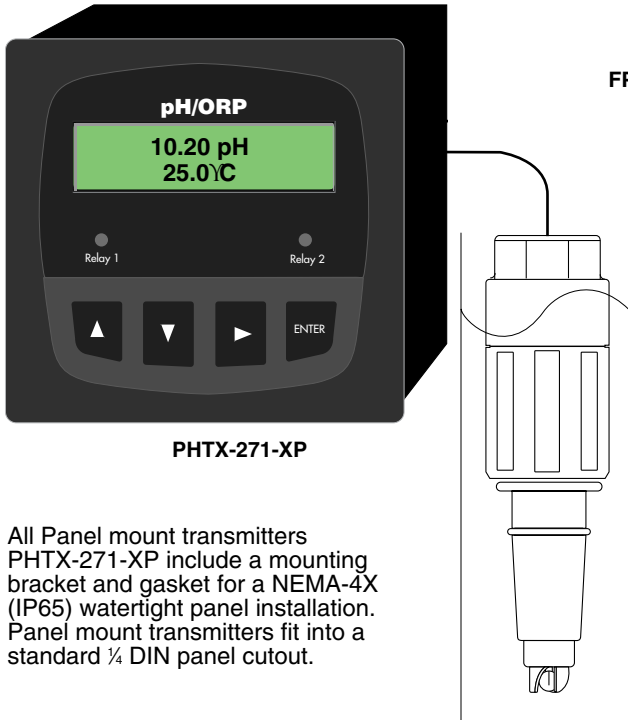


INDUSTRIAL pH INSTRUMENTATION & ELECTRODES

Installation

The transmitter is available in a panel mount or a field version.
Select the universal mount kit FP90UM to mount the transmitter on a surface near the sensor.

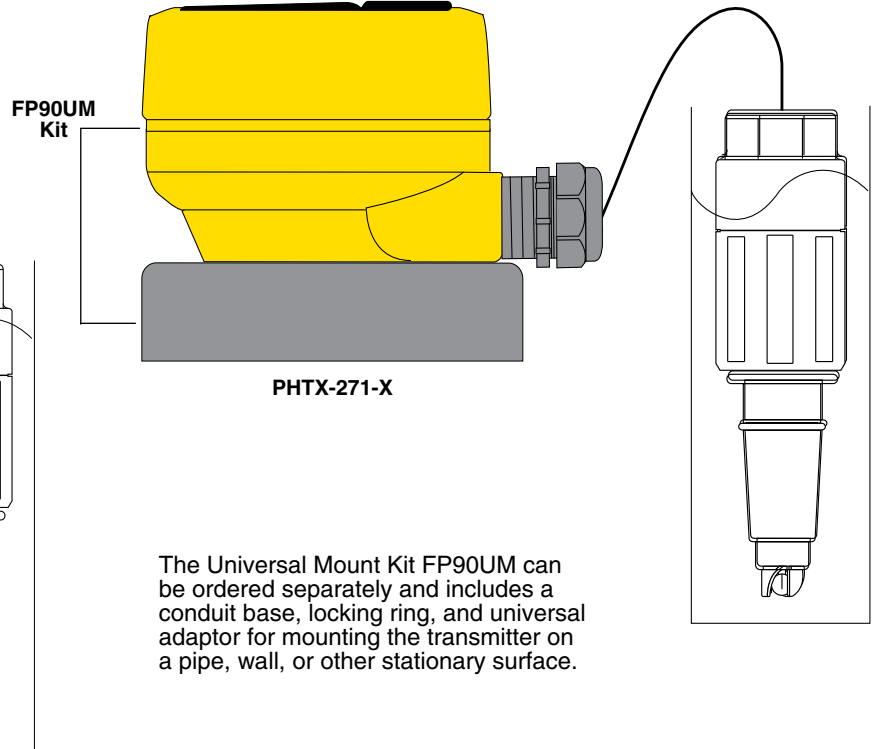
1. Panel Mount



PHTX-271-XP

All Panel mount transmitters PHTX-271-XP include a mounting bracket and gasket for a NEMA-4X (IP65) watertight panel installation. Panel mount transmitters fit into a standard ¼ DIN panel cutout.

2. Universal Mount

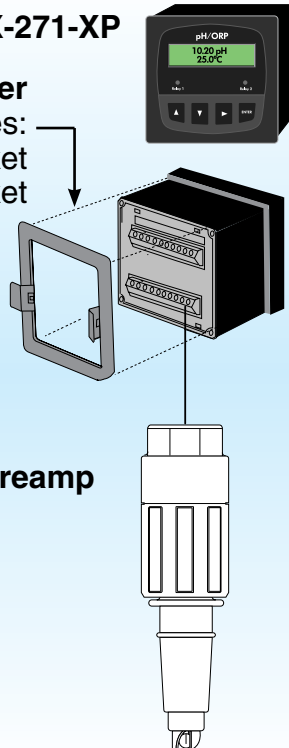


PHTX-271-X

The Universal Mount Kit FP90UM can be ordered separately and includes a conduit base, locking ring, and universal adaptor for mounting the transmitter on a pipe, wall, or other stationary surface.

PHTX-271-XP

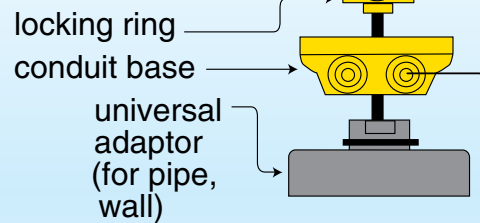
pH/ORP Transmitter includes: mounting bracket and panel gasket



Sensor w/ Preamp

pH/ORP Transmitter (PHTX-271)

Universal Adaptor Kit (FP90UM) includes:



Sensor w/ Preamp