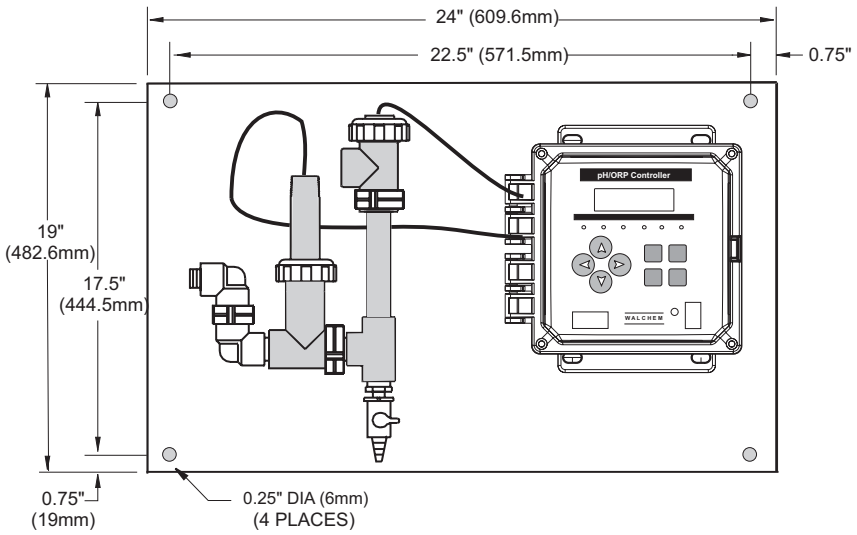
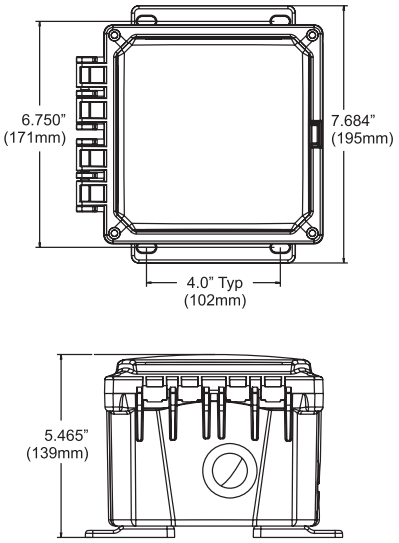




Inputs

Power
100-240 VAC, 50/60 Hz, 8A
Fuse: 1.0 ampere, 5 x 20 mm

Signals

pH/ORP:	±1500 mV
Temperature compensation (optional, pH only):	Pt100 or Pt1000
Interlock (optional):	Isolated, dry contact closure required (i.e. flow, level, etc.)

Measurement Performance

Range	-2 to 16 pH ±1500 mV (ORP)
Resolution	0.0015 pH units (.01 pH displayed) 92 μV (1mV displayed) (ORP)
Accuracy (calibrated)	±0.01 pH ±1mV (ORP)
Temperature Range	32 to 212°F (0 to 100°C)
Resolution	±0.09°F (0.05°C)
Accuracy	±0.9°F (0.5°C)

Mechanical (controller)

Enclosure	Polycarbonate
NEMA Rating	NEMA 4X (IP65)
Display	2 x 16 character backlit liquid crystal
Ambient Temperature	32 to 122°F (0 to 50°C)
Shipping weight	7 lbs (3 kg) (approximately)

Agency Certifications

UL	ANSI/UL 61010-1:2004, 2nd Edition*
CAN/CSA	C22,2 No.61010-1:2004 2nd Edition*
CE Safety	EN 61010-1 2nd Edition (2001)*
CE EMC	EN 61326 :1998 Annex A*

Outputs

Powered Relays	Internally powered relays switching line voltage 6A (resistive), 1/8 HP All relays are fused together as one group, total current for this group must not exceed 6A
Pulse Outputs	Opto-isolated, Solid state relay 150 mA, 40 VDC Max. VLOWMAX = .13V @ 18 mA
Dry contact relays	6 A (resistive), 1/8 HP Dry contact relays are not fuse protected

	CTRL1	CTRL2	CTRL3	CTRL4	ALARM
WPH410	Powered		Dry		
WPH420	Pulse		Dry		

4 - 20 mA 1 or 2 (optional)	Internally powered Fully isolated 600 Ohm max resistive load Resolution .001% of span Accuracy ± 1% of reading
pH/ORP Preamp Power	±5 VDC, 5mA

WEL pH/ORP Electrode (optional)

Temperature Range	50 to 158°F (10 to 70°C)
Operating Pressure	0 to 100 psi

Materials of construction

Electrode body	CPVC
Electrode reference	HDPE
O-rings	FKM
Electrode	Glass (pH) Platinum (ORP)
Optional ground rod	Titanium

1" NPTM pipe submersion connection
3/4" threaded NPTF tee in-line connection

Note: For EN61000-4-6,-3 the controller met performance criteria B.
*Class A equipment: Equipment suitable for use in establishments other than domestic, and those directly connected to a low voltage (100-240 VAC) power supply network which supplies buildings used for domestic purposes.