



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 (1 mV 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*

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.

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