

# pH & ORP MONITOR / CONTROLLERS

## 720 Series II



### APPLICATIONS:

- Process Control
- Reverse Osmosis
- Seawater Desalination
- Waste Treatment
- Food Processing
- Plating
- Power Plants
- Laboratories
- Printing
- Boilers & Cooling Towers
- Potable Water
- Waste Water Treatment
- Swimming Pools & Spas
- Paper & Pulp
- Bleach Manufacturing
- Reduction of Chromate Waste
- Environmental

### FEATURES:

- pH 0-14 or ORP  $\pm 2000$  mV
- Choice of analog meter or 3½ digit LCD.
- Advanced "Isolated" circuitry
- Automatic temperature compensation to 25°C (NERNST equation)
- Isolated 0-10 VDC recorder output - standard
- IP65/NEMA 4X water resistant and corrosion-proof enclosure
- Built-in electronic calibration
- Single set point/alarm standard
- Adjustable set point hysteresis
- Solid State 24 VDC Output

- 10 amp relay operates on choice of increasing or decreasing reading
- Push-to-test set point check
- Internal set point discourages unauthorized adjustment
- Selectable 115/230 VAC
- CE approved
- Unique, easily installed sensors
- Heavy duty "F" model sensors may be installed in ANY direction including inverted.

#### Options include:

- Second Alarm/control Module
- 4-20 mA Isolated Output
- Piezo Electric Alarm
- 3½ Digit Backlit Display
- Temperature Module
- 24 VAC Isolated power
- 24 VDC Supply Power option

The advanced "isolated" circuitry of the 720 Series II pH/ORP Monitor/controllers guarantees accurate and reliable measurements — completely eliminating ground-loop and noise issues.

The unique sensor preamp allows for longer distances between the sensor and the Monitor/controller without the loss of accuracy or reliability.

All Myron L pH Monitor/controllers feature a highly refined and precise Temperature Compensation circuit. This feature perfectly matches the NERNST equation correcting the displayed reading to 25°C. The TC

may be disabled to conform with USP requirements.

Built-in electronic calibration allows for fast quality checks without buffers. (Note: for maximum system accuracy buffers are recommended).

A push-to-test button makes set point checks easy, while the internal alarm set discourages unauthorized adjustments.

Standard on all controller models is a heavy-duty 10 amp output relay, operating on either increasing or decreasing readings. Bright green/red LEDs indicate above/below set point readings.

All 720 Series II models feature an IP65/NEMA 4X water resistant and corrosion-proof rated enclosure. Compact in size, at 152 x 122 mm/ 6 x 4.8 in., the 720 Series II models are suitable for panel, bench or surface mounting.

Accessories include a Remote Alarm - RA™.

**Custom & OEM Models available**

**MYRON L  
COMPANY**  
Water Quality Instrumentation  
Accuracy • Reliability • Simplicity

## SPECIFICATIONS

<b>Ranges</b>	0-14 pH or $\pm 2000$ mV ORP
<b>Display</b>	Analog Models: 2.5 in./63 mm Meter Digital Models: .5 in./13 mm 3½ Digit LCD; Optional: 3½ Digit Backlit
<b>Linearity</b>	Electronics: $\pm 0.05\%$ ( $\pm 0.01$ pH units / $\pm 1$ mV of full scale)
<b>Resolution</b>	Digital Display: $\pm 0.01$ pH units/ $\pm 1$ mV Analog Meter: $\pm 0.13$ pH units/ $\pm 40$ mV
<b>Sensitivity</b>	0.05% of full scale (0.01 pH units/1.0 mV)
<b>Stability</b>	$\pm 0.05\%$ of full scale ( $\pm 0.01$ pH units/ $\pm 1.0$ mV)
<b>Repeatability</b>	$\pm 0.05\%$ of full scale ( $\pm 0.01$ pH units/ $\pm 1.0$ mV)
<b>Calibration Check</b>	Built in (7 and 0 pH / 0 and -2000 mV)
<b>Recorder Output</b>	Isolated 0-10 VDC @ 5 mA max. (linear); standard all models
<b>Output Impedance</b>	100 $\Omega$ $\pm 5\%$
<b>Sensor Inputs</b>	1; 3 input option available. (pH & ORP sensors may NOT be mixed).
<b>Control Function</b>	Single Alarm/controller fully adjustable 0-100% of full scale Hysteresis: Adjustable from 0.3-3% of full scale Indicators: Above (red) and below (green) set point LEDs (reversible) Contact Rating: SPDT 10 amp @ 125 VAC, 30 VDC. Relay operates increasing or decreasing reading (selectable) Second Alarm/controller, with above specifications - optional
<b>Solid State Output</b>	Powered; 24 VDC Unregulated 30 mA max.
<b>Power</b>	115/230 VAC, 50/60 Hz, $\pm 15\%$ (user selectable) 24 VDC or AC optional
<b>Maximum Power Consumption</b>	@ 115V: 100 milliamps
<b>Dimensions</b>	152 H x 122 W x 96 D mm / 6 H x 4.8 W x 3.8 D in.
<b>Construction</b>	Fully gasketed heavy-duty ABS case; water resistant and corrosion proof IP65/NEMA 4X rated
<b>Ambient Temp Range</b>	0 - 60°C / 32 - 140°F
<b>Weight</b>	0.9 kg/2 lbs.

## TO ORDER 720II pH/ORP MONITOR/CONTROLLERS — Choose

MODEL	OPTIONS*
<b>pH</b>	
<b>721II</b> Analog Monitor Only	<b>-SC</b> Second Control Module
<b>722II</b> Analog Monitor/controller	<b>-4A</b> 4-20 mA Module (Digital only)
<b>723II</b> Digital Monitor/controller	<b>-PA</b> Built-in 70db Piezo Electric Alarm (Digital only)
<b>724II</b> Digital Monitor Only	<b>-35BL</b> 3½ Digit Backlit LCD
<b>ORP</b>	<b>-TP</b> Temperature Module (Digital only)
<b>726II</b> Analog Monitor Only	
<b>727II</b> Analog Monitor/controller	
<b>728II</b> Digital Monitor/controller	
<b>729II</b> Digital Monitor Only	

**Note:** Above Monitor does not include sensor.  
Please specify sensor when ordering.

\* See Price List for complete selection.

## ACCESSORIES

MODEL	DESCRIPTION
SMP50	Surface Mounting Plate
PAO	70db Piezo Electric Alarm
RA	Remote Alarm - RA™
RAW200	Wire (200 ft./60 meters) for Remote Alarm
024-1	24 VAC 1" Solenoid Valve

**Note:** 4, 7, and 10 pH calibration buffers are available.

**Note:** Custom & OEM Monitors/controllers available.  
Price and delivery upon request.

## pH/ORP SENSORS

These highly accurate sensors utilize a preamplifier to ensure stability over longer distances, and to eliminate potential noise problems thereby ensuring accurate repeatable readings. In addition, these reliable sensors feature an integral temperature sensor to ensure accurate and rapid automatic temperature compensation. Several choices of sensors are available, in 1/2" MNPT or 3/4" MNPT, depending on the demands of the application. The basic pH sensor utilizes the standard round glass electrode with a single reference junction. The basic ORP sensor utilizes a Platinum electrode with a single reference junction. See pH/ORP Sensor Selection Guide for additional information.



**NOTE:** Heavy Duty "F" model sensors may be installed in ANY direction including inverted.

## SPECIFICATIONS

**Temperature Compensation:** Integral temperature sensor provides automatic TC to 25°C between 0 - 100°C / 32 - 212°F.

**Pressure/Temperature Limits:** P72S: Intermittent use up to 50 psi/690kPa 100°C/212°F. High Temperature models available, see pH/ORP Sensor Selection Guide.

**Cable:** 5 wire, 24 ga. shielded, 10 ft./3 meters standard. 25 and 100 ft. / 8 and 30 meter lengths available.

**Material:** CPVC body standard.

**Dimensions:** P72S typical: overall length 165 mm/6.5 in., body 127 mm/5 in., electrode length 19 mm/.75 in.

## TO ORDER SENSOR — Choose

Fitting Size 1/2" or 3/4"	2 or 4
Single Junction	S
Double Junction (Environmental)	D
Low Conductivity (RO/DI pH applications)	LC
Heavy Duty Flat Tip	F

### Standard Options include:

25 ft./8 meter cable	25
100 ft./30 meter cable	100
Add above suffixes to Series number	
P7 for pH or O7 for ORP.	

**Example:** P72D-25 (1/2" MNPT double junction pH sensor with a 25 ft./8 meter cable)

See pH/ORP Sensor Selection Guide for details

## LIMITED WARRANTY

All Myron L Monitor/controllers have a Two Year Limited Warranty. pH Sensors have a Six Month Limited Warranty. If any Monitor/controller fails to function normally, return the unit to the factory prepaid. If, in the opinion of the factory, failure was due to materials or workmanship, repair or replacement will be made without charge. A reasonable service charge will be made for diagnosis or repairs due to normal wear, abuse or tampering. Warranty is limited to the repair or replacement of Monitor/controller only. The Myron L Company assumes no other responsibility or liability.

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