

# pH & ORP MONITOR / CONTROLLERS

## 720 Series II



### BENEFITS:

- **Affordable**
- **Ease of Operation**
- **Low Maintenance**
- **Ensures Product Quality**

### APPLICATIONS:

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

### FEATURES:

- pH 0-14 or ORP  $\pm 2000$  mV
- Choice of 3½ digit display or analog meter
- 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 Certified
- 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 Supply
- 24 VDC Isolated Power Supply

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 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.

Additional options include a Remote Alarm™ model RA.

**CUSTOM & OEM MODELS AVAILABLE**

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

## SPECIFICATIONS

<b>Ranges</b>	0-14 pH or ±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: ±0.05% (±0.01 pH units/±1 mV of full scale)
<b>Resolution</b>	Analog Meter: ±0.13 pH units/±40 mV Digital Display: ±0.01 pH units/±1 mV
<b>Sensitivity</b>	0.05% of full scale (0.01 pH units/1.0 mV)
<b>Stability</b>	±0.05% of full scale (±0.01 pH units/±1.0 mV)
<b>Repeatability</b>	±0.05% of full scale (±0.01 pH units/±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>	100Ω ±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, ±15% (user selectable) 24 VAC or VDC 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.

## 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 720II 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/690 kPa 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:** 1/2" MNPT: CPVC body. 3/4" MNPT: Ryton®\* body.

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

\*Ryton® PPS is a registered trademark of Chevron Phillips Chemical Company LLC.

## TO ORDER 720II pH/ORP MONITOR/CONTROLLERS — Select MODEL — OPTIONS\*

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

**Note:** Above monitor/controllers do not include sensor. Please specify sensor when ordering.

\* See Price List for complete selection.

## ACCESSORIES

MODEL	DESCRIPTION
SMP50	Surface Mounting Plate
PAO	70 db 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:** See Price List for complete selection. Custom & OEM Monitors/controllers available. Price and delivery upon request.

## TO ORDER SENSORS — Select

P7XX (pH) or O7XX (ORP)	2 or 4	Fitting Size 1/2" or 3/4"
	S	Single Junction
	D	Double Junction (Environmental)
	LC	Low Conductivity (RO/DI pH applications)
	F	Heavy Duty Flat Tip

### Example:

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

### Standard Options include:

-25 25 ft./8 meter cable  
-100 100 ft./30 meter cable

See 720II Sensor Selection Guide for details.

## LIMITED WARRANTY

All Myron L Monitor/controllers have a Two (2) Year Limited Warranty. pH & ORP Sensors have a Six (6) 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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**Built On Trust.** Founded in 1957, the Myron L Company is one of the world's leading manufacturers of water quality instruments. Because of our commitment to product improvement, changes in design and specifications are possible. You have our assurance any changes will be guided by our product philosophy: accuracy, reliability, and simplicity.

