Conductivity, pH/ORP & Disinfection

W900 Series Controllers

The W900 series provides reliable, flexible and powerful control for your water treatment program.

Summary of Key Benefits

- Large touchscreen display with icon-based programming makes setup easy
- Universal sensor input provides extraordinary flexibility; the same controller can be used with almost any type of sensor needed
- Four I/O slots allow complete flexibility in adding additional sensors, analog inputs and analog outputs
- Multiple language support allows simple setup
- Eight relay control outputs allow the controller to be used in more applications
- Economical wall-mount package for easy installation
- On-screen and web page graphing of sensor values and control output status
- Complete flexibility in the function of each relay
  - On/Off Setpoint
  - Time Proportional Control
  - Pulse Proportional Control (when purchased with 4-20 mA or pulse solid state opto outputs)
  - Flow Proportional Control (when purchased with 4-20 mA or pulse solid state opto outputs)
  - PID Control (when purchased with 4-20 mA or pulse solid state opto outputs)
  - In-Range or Out-of-Range activation
  - Proportion
  - Timer-based activation
  - Activation based upon the state of a contact closure
  - Timed activation triggered by a Water Contactor or Paddlewheel flow meter’s accumulated total flow
  - Activate with another output
  - Activate as a percent of another output’s on-time
  - Alarm
  - Spike Set Point
  - PPM Volume
  - Target PPM
  - For Cooling Tower and Boiler applications:
    - Biocide Timer
    - Boiler blowdown on conductivity using intermittent sampling

- Datalogging
- Emailing Alarm messages, Datalog reports or System Summary reports
- Ethernet for remote access via the Internet, LAN or optional Modbus/TCP
Sensor Input Signals (0-8 depending on model code)

- Analog (4-20 mA) Sensor Input (0-24 depending on model code)
- 100-240 V Inputs

Powered Mechanical Relays (0-8 model code dependent)

- 4 - 20 mA (0-16 model code dependent)

Available Power: Isolated 24 VDC ±15% supply per channel. 1.5 W (62.5 mA maximum for each channel)

- Channel 1, 130 ohm input resistance, Channel 2-6, 280 ohm input resistance

- 2-wire loop powered and self-powered transmitters supported
drain, open collector, transistor or reed switch. Types: Paddlewheel Flowmeter
digital input switch is closed, 0-500 Hz, 1.0 msec minimum width. Devices supported: Any device with isolated open

- High Speed Counter- Type Digital Inputs
digital input switch is closed. Typical response time: < 2 seconds. Devices supported: Any isolated dry contact (i.e. relay,

- Low Speed Counter- Type Digital Inputs

Electrical: Optically isolated and pr

Specifications

<table>
<thead>
<tr>
<th>Power</th>
<th>Voltage</th>
<th>Current</th>
<th>Fuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-240 V AC</td>
<td>50 or 60 Hz</td>
<td>1.5 A</td>
<td>6.3 A</td>
</tr>
</tbody>
</table>

Sensor Input Signals (0-8 depending on model code)

<table>
<thead>
<tr>
<th>Conducting Conductivity</th>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-300,000 µS/cm</td>
<td>0.1 µS/cm</td>
<td>0.0015% of span</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mechanical (Sensors)</th>
<th>Sensor</th>
<th>Pressure</th>
<th>Temperature</th>
<th>Materials</th>
<th>Process Connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrodeless conductivity</td>
<td>0-150 psi (0-1 bar)</td>
<td>0-150°F (0-70°C)</td>
<td>CPVC, Glass, PTFE</td>
<td>3/4&quot; NPTF, 1/2&quot; NPTM</td>
<td></td>
</tr>
<tr>
<td>Chlorine Dioxide</td>
<td>0-14.7 psi (0-1 bar)</td>
<td>0-131°F (0-55°C)</td>
<td>Glass, FKM, PTFE</td>
<td>3/4&quot; NPTF, 1/2&quot; NPTM</td>
<td></td>
</tr>
<tr>
<td>Total Chlorine</td>
<td>0-14.7 psi (0-1 bar)</td>
<td>0-113°F (0-45°C)</td>
<td>Glass, FKM, PP</td>
<td>3/4&quot; NPTF, 1/2&quot; NPTM</td>
<td></td>
</tr>
<tr>
<td>Peracetic Acid</td>
<td>0-14.7 psi (0-1 bar)</td>
<td>0-131°F (0-55°C)</td>
<td>Glass, SS, FKM</td>
<td>3/4&quot; NPTF, 1/2&quot; NPTM</td>
<td></td>
</tr>
<tr>
<td>Free Chlorine/Bromine</td>
<td>0-14.7 psi (0-1 bar)</td>
<td>0-113°F (0-45°C)</td>
<td>Glass, FKM, PTFE</td>
<td>3/4&quot; NPTF, 1/2&quot; NPTM</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>0-100 psi (0-7 bar)</td>
<td>0-158°F (0-70°C)</td>
<td>CPVC, Glass, EPDM</td>
<td>3/4&quot; NPTF, 1/2&quot; NPTM</td>
<td></td>
</tr>
<tr>
<td>pH (High Pressure)</td>
<td>0-300 psi (0-21 bar)*</td>
<td>0-158°F (0-70°C)*</td>
<td>Glass, FKM, PP</td>
<td>3/4&quot; NPTF, 1/2&quot; NPTM</td>
<td></td>
</tr>
<tr>
<td>pH (High Pressure Tower)</td>
<td>0-300 psi (0-21 bar)*</td>
<td>0-158°F (0-70°C)*</td>
<td>316SS, PEEK</td>
<td>3/4&quot; NPTM</td>
<td></td>
</tr>
<tr>
<td>Contacting Conductivity</td>
<td>0-150 psi (0-10 bar)*</td>
<td>32-158°F (0 to 70°C)*</td>
<td>PEEK, 316 SS in-line tee</td>
<td>3/4&quot; NPTF in-line tee</td>
<td></td>
</tr>
<tr>
<td>Electrodeless Conductivity</td>
<td>0-150 psi (0-10 bar)*</td>
<td>32-158°F (0 to 70°C)*</td>
<td>PEEK, 316 SS in-line tee</td>
<td>3/4&quot; NPTF in-line tee</td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-2000 psi (0-14 bar)</td>
<td>32-248°F (0 to 120°C)</td>
<td>316SS, PEEK 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-2000 psi (0-14 bar)</td>
<td>32-248°F (0 to 120°C)</td>
<td>316SS, PEEK 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacting conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrodeless conductivity</td>
<td>0-300,000 psi (0-21 bar)</td>
<td>32-158°F (0-70°C)</td>
<td>316SS, FKM 3/4&quot; NPTM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Specifications may vary depending on model, configuration, and application.
Sensor Input Signals (0-8 depending on model code)
- Digital Input Signals (12)

- Power Inputs
  - 100-240 V AC, 50 or 60 Hz, 1.5 A max, 6.3 Amp

- Powered Mechanical Relays (0-8 model code dependent)
- Outputs
  - 4 - 20 mA (0-8 model code dependent)
    - Internally powered, 10,000 ohm max resistance
  - Resolution: 0.015% of span
  - Accuracy: ± 0.5% of reading

- Measurement Performance
  - Temperature: 100 or 1000 ohm RTD, 10K or 100K Thermistor
  - Electrodeless Conductivity 500 - 12,000 µS/cm 1 µS/cm, 0.01 mS/cm, 0.1 mS/m, 0.001 S/m, 1 ppm ±1% of reading
  - Disinfection sensors -2000 to 1500 mV 0.1 mV ±1 mV
  - ORP -1500 to 1500 mV 0.1 mV ±1 mV
  - pH -2 to 16 pH units 0.01 pH units ±0.01% of reading
  - 10.0 Cell Contacting Conductivity 0-300,000 µS/cm 10 µS/cm, 0.01 mS/cm, 1 mS/m, 0.001 S/m, 10 ppm ±1% of reading
  - 1.0 Cell Contacting Conductivity 0-30,000 µS/cm 1 µS/cm, 0.001 mS/cm, 0.1 mS/m, 0.0001 S/m, 1 ppm ±1% of reading

- Specifications
  - Dimensions
    - 12.2W x 13.8H x 5.4D" (310 x 351 x 137 mm)
    - Enclosure Rating
      - NEMA 4X (IP65)
    - Enclosure Material
      - Stainless Steel 316, PEEK, PFA, PVDF, CPVC, PTFE
    - Display
      - 320 x 240 pixel monochrome backlit display with touchscreen
    - Storage Temperature
      - 4 to -19°F (-20 to 85°C)
    - Humidity
      - 10 to 90%, non-condensing

- Agency Certifications
  - Safety
    - UL 61010-1:2012, 3rd Edition
    - CSA C22.2 No.61010-1:2012, 3rd Edition
    - IEC 61010-1:2010 3rd Edition
    - EN 61326-1:2013
  - EMC
    - IEC 61326-1:2012
    - EN 61326-1:2013
  - Environment
    - EN 61000-4-6, EN 61000-4-3 the controller met performance criteria B. This equipment is 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.

- Mechanical (Sensors) (see graph)
  - Range
    - Pressure: 0-100 psi (0-7 bar)
    - Temperature: -20 to 120°C
    - Materials
      - PTFE, PVDF, Tefzel, Teflon
    - Process Connections
      - 1/4" NPT, male threaded
      - 1/4" male Inox, 3/8 OD tubing

- Mechanical (Controller) (see graph)
  - Enclosure Material
    - Polycarbonate
  - Enclosure Rating
    - NEMA 4X (IP65)
  - Dimensions
    - 12.2W x 13.8H x 5.4D" (310 x 351 x 137 mm)
  - Display
    - 320 x 240 pixel monochrome backlit display with touchscreen
  - Temperature
    - -20 to 120°C
  - Humidity
    - 10 to 90%, non-condensing

- Pulse Outputs (4-0 model code dependent)
  - Opto-isolated, solid-state relay, 220VAC, 40 VDC
  - Dimensions
    - 128 x 138 x 54 mm
  - Display
    - 320 x 240 pixel monochrome backlit display with touchscreen
  - Temperature
    - -10 to 70°C
  - Humidity
    - 10 to 90%, non-condensing

- Power Consumption
  - 100-240 VAC, 50 or 60 Hz, 1.5 A max
  - 1/8 HP (93W)

- Power Limit
  - 100-240 VAC, 50 or 60 Hz, 1.5 A max
  - 1/8 HP (93W)
Specifications

Inputs

Power
100-240 VAC, 50 or 60 Hz, 13A max
Fuse: 6.3 Amp

Sensor Input Signals (0-8 depending on model code)
- Contacting Conductivity 0.01%, 0.1%, 1%, or 10% cell constant, or
- Electrodes Conductivity
- Contacting Conductivity
- Amplified pH or ORP which requires a preamplified signal. Withins WEL or VDS series recommended.
- 0/5VDC power available for external processing.
Each sensor input card contains a temperature input. Temperature: 100 or 1000 ohm RTD. 10k or 100k Thermistor

Analog (4-20 mA) Sensor Input (0-24 depending on model code)
- Powered Mechanical Relays (0-8 model code dependent)
- Outputs
- 4 - 20 mA (0-16 model code dependent)
  - Internally powered. 10VDC biased signal. 600 ohm max load resistance
  - Resolution: 0.015% of scale
  - Accuracy: ±0.3% of reading

Measurement Performance

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducting Conductivity</td>
<td>0.00000001 mS/cm</td>
<td>0.0000001 mS/cm</td>
<td>±0.5 % of reading</td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>0.00001 mS/cm</td>
<td>0.00001 mS/cm</td>
<td>±0.5 % of reading</td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>0.0001 mS/cm</td>
<td>0.0001 mS/cm</td>
<td>±0.5 % of reading</td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>0.001 mS/cm</td>
<td>0.001 mS/cm</td>
<td>±0.5 % of reading</td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>0.01 mS/cm</td>
<td>0.01 mS/cm</td>
<td>±0.5 % of reading</td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>0.1 mS/cm</td>
<td>0.1 mS/cm</td>
<td>±0.5 % of reading</td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>1.0 mS/cm</td>
<td>1.0 mS/cm</td>
<td>±0.5 % of reading</td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>10.0 mS/cm</td>
<td>10.0 mS/cm</td>
<td>±0.5 % of reading</td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>100.0 mS/cm</td>
<td>100.0 mS/cm</td>
<td>±0.5 % of reading</td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>1000.0 mS/cm</td>
<td>1000.0 mS/cm</td>
<td>±0.5 % of reading</td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>10000.0 mS/cm</td>
<td>10000.0 mS/cm</td>
<td>±0.5 % of reading</td>
</tr>
</tbody>
</table>

Mechanical (Sensors)

<table>
<thead>
<tr>
<th>Sensor</th>
<th>Pressure</th>
<th>Temperature</th>
<th>Materials</th>
<th>Process Connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducting Conductivity</td>
<td>0.00000001 mS/cm</td>
<td>±0.5 % of reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>0.00001 mS/cm</td>
<td>±0.5 % of reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>0.001 mS/cm</td>
<td>±0.5 % of reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>0.01 mS/cm</td>
<td>±0.5 % of reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>0.1 mS/cm</td>
<td>±0.5 % of reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>1.0 mS/cm</td>
<td>±0.5 % of reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>10.0 mS/cm</td>
<td>±0.5 % of reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>100.0 mS/cm</td>
<td>±0.5 % of reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>1000.0 mS/cm</td>
<td>±0.5 % of reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducting Conductivity</td>
<td>10000.0 mS/cm</td>
<td>±0.5 % of reading</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Agency Certifications

Safety:
- UL61010-1:2012, 3rd Edition
- IEC61010-1:2012
- EN61010-1:2012

EMC:
- IEC61326-1:2012
- EN61326-1:2013

Note: For EN61000-4-6, EN61000-4-3 the controller met performance criteria B. This equipment is suitable for use in establishments other than domestic and those directly connected to a low voltage (150-240 VAC) power supply network which supplies buildings used for domestic purposes.
**Sensor Mounting**

- Sensors #1-6
- Base

**WiFi**

- Base

---

**Model Code**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I/O MODULES #1-4 (must be in alphabetical order)</td>
<td></td>
</tr>
<tr>
<td>RELAYS/WIRING</td>
<td></td>
</tr>
<tr>
<td>LABEL</td>
<td></td>
</tr>
<tr>
<td>4 opto 4 powered relays</td>
<td></td>
</tr>
<tr>
<td>4 opto 4 dry relays</td>
<td></td>
</tr>
<tr>
<td>4 powered 4 dry relays</td>
<td></td>
</tr>
<tr>
<td>2 opto 6 dry relays</td>
<td></td>
</tr>
<tr>
<td>7 powered 1 dry relays</td>
<td></td>
</tr>
<tr>
<td>8 powered relays</td>
<td></td>
</tr>
<tr>
<td>Boiler</td>
<td>BL</td>
</tr>
<tr>
<td>Walchem</td>
<td></td>
</tr>
<tr>
<td>Four Analog Outputs</td>
<td></td>
</tr>
<tr>
<td>Six Analog Inputs</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>N</td>
</tr>
<tr>
<td>Corrosion (Future)</td>
<td>C</td>
</tr>
<tr>
<td>Hardwired</td>
<td></td>
</tr>
<tr>
<td>Dual Analog Inputs + Four Analog Outputs</td>
<td>E</td>
</tr>
<tr>
<td>Dual Analog Inputs</td>
<td></td>
</tr>
<tr>
<td>Dual Sensor Inputs</td>
<td></td>
</tr>
<tr>
<td>Prewired with DIN power cord, no pigtails</td>
<td></td>
</tr>
<tr>
<td>Prewired with Brazilian power cord, no pigtails</td>
<td></td>
</tr>
<tr>
<td>Prewired with USA power cord, 6 pigtails, two 20 ft. pulse cables</td>
<td></td>
</tr>
<tr>
<td>Prewired with USA power cord and 7 pigtails</td>
<td></td>
</tr>
<tr>
<td>Prewired with USA power cord and 8 pigtails</td>
<td></td>
</tr>
</tbody>
</table>

---

**Sensor Mounting**

- Dipper, Pyxis, Chlorine, ClO2 sensors NOT available with Submersion mounting.
- If a high pressure manifold is selected, only Hi P sensors and Makeup available.

---

**Dimensions**

- Width: 11.25 in
- Height: 6.38 in
- Thickness: 3.05 in

---

**W900 Series Controllers**

The W900 series provides reliable, flexible and powerful control for your water treatment program.

**Summary of Key Benefits**

- Large touch screen display with icon based programming makes setup easy
- Universal sensor input provides extraordinary flexibility; the same controller can be used with almost any type of sensor needed
- Four I/O slots allow complete flexibility in adding additional sensors, analog inputs and analog outputs
- Multiple language support allows simple setup
- Eight relay control outputs allow the controller to be used in more applications
- Economical wall mount package for easy installation
- On-screen and web page graphing of sensor values and control output status
- Complete flexibility in the function of each relay
  - On/off setpoint
  - Timer/Proportional Control
  - Pulse Proportional Control (when purchased with 4-20 mA or pulse solid state outputs)
  - Flow Proportional Control (when purchased with 4-20 mA or pulse solid state outputs)
  - PID Control (when purchased with 4-20 mA or pulse solid state outputs)
  - In-range or Out-of-Range activation
  - Probe wash
  - Timer-based activation
  - Activation based on the state of a contact closure
  - Time-based activation triggered by a Water Contactor or Paddlewheel flow meter's accumulated total flow
  - Activate with another output
  - Activate as a percent of another output's on-time
  - Alarm
  - Spike Set Point
  - PPM Volume
  - Target PPM
  - For Cooling Tower and Boiler applications:
    - Biocide Timer
    - Boiler blowdown on conductivity using intermittent sampling

**Datalogging**

- Emailing Alert messages, Datalog reports or System Summary reports
- Ethernet for remote access via the Internet, LAN or optional Modbus/TCP
The W900 series provides reliable, flexible and powerful control for your water treatment program.

Summary of Key Benefits

- Large backlit display with icon based programming makes setup easy
- Universal sensor input provides extraordinary flexibility: the same controller can be used with almost any type of sensor needed
- Four I/O slots allow complete flexibility in adding additional sensors, analog inputs and analog outputs
- Multiple language support allows simple setup
- Eight relay control outputs allow the controller to be used in more applications
- Economical wall-mount package for easy installation
- On-screen and web page graphing of sensor values and control output status
- Complete flexibility in the function of each relay:
  - On/off setpoint
  - Time proportional control
  - Pulse proportional control (when purchased with 4-20 mA or pulse solid state opto outputs)
  - Flow proportional control (when purchased with 4-20 mA or pulse solid state opto outputs)
  - PID control (when purchased with 4-20 mA or pulse solid state opto outputs)
  - In-range or Out-of-Range activation
  - Probe wash
  - Timer-based activation
  - Activation based upon the state of a contact closure
  - Time-based activation triggered by a Water Contactor or Paddlewheel flow meter’s accumulated total flow
  - Activate with another output
  - React to percent of another output’s on-time
  - Alarm
  - Spike set point
  - PPM volume
  - Target PPM
  - For Cooling Tower and Boiler applications:
    - Biocide timer
    - Boiler blowdown on conductivity using intermittent sampling

- Data logging
- Emailing alarm messages, dating reports or system summary reports
- Ethernet for remote access via the Internet, LAN or optional Modbus/TCP