W900 Series

THE NEXT GENERATION OF POWERFUL CONTROL

Enjoy unparalleled versatility and powerful programming for complete control of chemical metering pumps and valves in a broad range of water treatment applications.

The W900 Series has all the features of the W600 Series controller plus:
- Four I/O slots allow complete flexibility in adding sensors, analog inputs, output slots, and LPR corrosion sensors.
- Up to 8 sensor inputs
- Up to 24 analog inputs
- Up to 18 analog outputs
- 12 digital inputs
- Eight relay control outputs
- Up to 8 virtual inputs, including calculations, redundant sensor and disturbance input
- Up to 8 virtual outputs
- Optional WiFi connection, to the LAN or to a mobile device
- Eight relay control outputs

VTouch® Remote Account Manager

VTouch is a collection of technologies designed for companies offering managed water treatment services. The VTouch solution allows service companies to more effectively manage remote accounts by significantly reducing the complexities associated with the deployment of water treatment service programs based around communicating products.

The VTouch Account Manager is fully synchronized with Walchem’s web-based controllers: the W900 and W600, as well as legacy models, making setup and configuration simple and fast. Just connect the VTouch-enabled controller to the Internet through an Ethernet connection to a LAN or cellular gateway, and the controller data is sent to your VTouch account.

Additional Relay Functions:
- Flow Proportional Control
- PPM Volume
- Target PPM
- Flow meter ratio
- Volumetric Blending
- Disturbance Variable Control

Sensors + Accessories

Disinfection Sensors

Amperometric disinfection sensors offer a cost-effective and reliable solution for your disinfection control requirements. We offer sensors, in varying ranges of concentrations, for free chlorine, bromine, total chlorine, hydrogen peroxide (H₂O₂) and free available chlorine (FAC). Whether the application is cooling tower, food and beverage, drinking water, wastewater or air processing, these sensors are the ideal solution.

Fluorometers

The Little Dipper® II and Pools in the Fluorometers are rugged, 24/7 sensing sensors that provide nuisance-free, reliable data in a compact and solid-state relay. They can be used with data collection systems to monitor and control the level of treatment chemicals for cooling tower and boiler applications. The touchless Little Dipper is a small, lightweight and highly durable fluorometer ideal for quick measurements in the field.

Contacting Conductivity Sensors

Contacting conductivity sensors are ideal for use in cooling towers and boiler applications, as well as many other non-oily applications. A variety of cell constants are available to tailor a range of conductivities.

pH/ORP Sensors

Conductive pH/ORP electrodes are suitable for use in a wide range of industrial and domestic applications. They are easy to use, reliable, and compact.

Copper/Nickel Sensors

These sensors are available to measure copper, nickel, and cobalt concentrations. Copper/Nickel sensors are available in dry-in-law monitoring of solutions, or flow-through sensors that are designed for use in 1.5- and 2-inch lines.

Water Treatment Controllers

High quality accessories for cooling tower, boiler, potable water, and wastewater applications.

Carefully designed controllers and sensor line are selected for compatibility with our pumps and controllers to enable our customers to provide a complete system solution.

Water Meters

WFM Series water meters have earned a reputation for design simplicity, wide range of applications and accuracy in low-quality water. The WFM Series uses the rotodynamic flow measurement principle, which has been proven in the field for over 50 years. These meters are available with either a two-wire read switch, or a solid state, three-wire Hall-effect sensor.

Electrochemical Conductivity Sensors

Electrochemical conductivity sensors may be installed in a variety of process, chemical metering control applications, including oily, cleaner baths, chromates, lines, tanks, tank scrubbers and other non-oily, chemical control applications at the conductivity of 100 mS/cm (range varies with solution temperature).

Monitoring Pumps

The Hall effect sensor technology that Walchem uses is the most advanced and comprehensive in the world. Over 50 years of pump experience and a commitment to superior performance have been dedicated to development of many industry-quality tools, including 9900 series multi-mode technology, and the world’s highest capacity centrifugal pumps.

Accessories

To complete your system, Walchem provides high quality accessory products that are ideal for use in installing pump circulation, pressure level control, pressure sensors, and vacuum systems. We also offer in-process sensors and switches that are designed to provide compatibility with our pumps and controllers to enable our customers to provide a complete system solution.

Walchem, Inc.

Walchem integrates its advanced sensing, instrumentation, fluid handling and communications technologies to deliver reliable and innovative solutions to the global water treatment market. Our in-house engineering is driven by quality, technology and innovation. For more information on the Walchem line of products, visit walchem.com.
W100 Series

The W100 Series Controllers provide an economical and reliable way to keep your water treatment program under control.

- Large 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
- Multiple language support allows simple setup
- The third control relay allows the controller to be used in more places than other entry level products
- Optional analog (4-20 mA) output for recording, datalogging, proportional control or connection to building energy management systems
- Wall-mount package for easy installation
- Complete flexibility in the function of each relay

For Cooling Tower or Boiler Applications:
- Blended conductivity or disinfection
- Universal sensor input; conductivity (contacting and electrolytic), pH/ORP/ISE, or disinfection
- Accumulated total flow
- Optional analog (4-20 mA) output for remote access via the Internet, LAN or Modbus/TCP

For General Conductivity, pH, ORP, and Disinfection Applications:
- Time Proportional Control
- Pulse Proportional Control (when purchased with 4-20mA or pulse solid-state opto outputs)
- In-range or Out-of-range activation
- Prove wash timer
- Time-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 other output
- Alarm
- PID Control (when purchased with 4-20mA or pulse solid-state opto outputs)
- Prove Wash Timer

W100P Panel Mount Controller Features:
- Compact 1/4 DIN panel mount enclosure
- Universal sensor input; conductivity (contacting and electrolytic), amplified pH/ORP/ISE, or disinfection
- Four control outputs
- Two pH/ORP/ISE models for use with non-amplified electrodes with or without BNC connector
- Same flexibility of each relay as the wall mount W100 controllers

W600 Series

The W600 Series Controllers provide powerful programming and complete control in a broad range of water treatment applications.

- Large touchscreen display
- Universal sensor input provides extraordinary flexibility; the same controller can be used with almost any type of sensor needed
- Multiple language support allows simple setup
- 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
- Datalogging
- Emailing Alarm messages, Datalog, Graph, or System Summary reports
- Ethernet option for remote access via the Internet, LAN or Modbus/TCP

For Cooling Tower/Boiler Control:
- Cu/Ni Controllers
- Food and Beverage Disinfection
- Wastewater Neutralization + Disinfection
- RO Systems
- Typical Applications for W900/W600/W100 Controllers

The W600 Series has all the features of the W100 Series controller plus:
- Combination Sensor Input and Analog Input board that add even more flexibility
- Lead/Lag control of up to 6 relays
- Optional dual analog (4-20 mA) input for Fluorometers or nearly any other process value
- Six control outputs allow the controller to be used in more applications
- Plating Control (on/off with totalizing as metal turnovers)
- Plating Follower (activate with another relay)
- Flow Timer
- Lead/Lag control of up to 6 relays
- On-screen and web page graphing of sensor values and control output status

W600 Series Metal Finishing

The W600 Series Copper Nickel Controllers have all the features of the W600 Series plus:

- Dual analog inputs for any 4-20 mA transmitter
- Universal analytical sensor card for pH/ORP/ISE, conductivity or disinfection
- Combination analog input and analytical sensor input
- Six virtual inputs that are calculated from two real inputs or one input and a constant

W600 Series Cu/Ni Controllers provide reliable, flexible and powerful control for your electroless plating or etching process

Typical Applications for W900/W600/W100 Controllers

- Wastewater Neutralization + Disinfection
- RO Systems
- Food and Beverage Disinfection
- Potable Water Treatment
- Swimming Pools + Spas
- Cooling Tower/Boiler Control
- Metal Finishing + Printed Circuit Board
- Irrigation + Fertigation
W100 Series

The W100 Series Controllers provide an economical and reliable way to keep your water treatment program under control.

- Large 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
- Multiple language support allows simple setup
- The third control relay allows the controller to be used in more places than other entry level products
- Optional analog (4-20 mA) output for recording, datalogging, proportional control or connection to building energy management systems
- Wall-mount package for easy installation
- Complete flexibility in the function of each relay

For Cooling Tower or Boiler Applications:
- Blown on conductivity
- Blown time proportional to makeup water volume
- Boiler blowdown on conductivity using intermittent sampling
- Flow in proportion to blown time
- Flow time proportional to temperature
- Flow as a percent of elapsed time

For General Conductivity, pH, ORP, and Disinfection Applications:
- Pulse Proportional Control
- Pulse Proportional Control (when purchased with 4-20mA or pulse solid-state opto outputs)
- In-range or Out-of-range activation
- Virtual inputs
- ICID Control (when purchased with 4-20mA or pulse solid-state opto outputs)
- Virtual outputs
- Process wash timer
- On-screen and web page graphing of sensor values and control output status

W600 Series

The W600 Series Controllers provide powerful programming and complete control in a broad range of water treatment applications.

- Large touchscreen display
- Universal sensor input provides extraordinary flexibility; the same controller can be used with almost any type of sensor needed
- Multiple language support allows simple setup
- Economical wall-mount package for easy installation
- On-screen and web page graphing of sensor values and control output status
- Full flexibility in the function of each relay

For Cooling Tower/Boiler Control:
- Six control outputs
- Six control outputs
- Six control outputs
- Six control outputs
- Two virtual inputs that are calculated from two real inputs

For Metal Finishing + Printed Circuit Board:
- Six control outputs
- Six control outputs
- Six control outputs
- Six control outputs
- Two virtual inputs that are calculated from two real inputs

For Irrigation + Fertigation:
- Six control outputs
- Six control outputs
- Six control outputs
- Six control outputs
- Two virtual inputs that are calculated from two real inputs

Typical Applications for W900/W600/W100 Controllers

- Wastewater Neutralization + Disinfection
- RO Systems
- Food and Beverage Disinfection
- Potable Water Treatment
- Swimming Pools + Spas
- Cooling Tower/Boiler Control
- Metal Finishing + Printed Circuit Board
- Irrigation + Fertilization
W100 Series Controller Features:
- Large 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
- Multiple language support allows simple setup
- The third control relay allows the controller to be used in more places than other entry level products
- Optional analog (4-20 mA) output for recording, datalogging, proportional control or connection to building energy management systems
- Universal sensor input provides extraordinary flexibility; the same controller can be used with almost any type of sensor needed
- Multiple language support allows simple setup
- 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
- Complete flexibility in the function of each relay
- For Cooling Tower or Boiler Applications:
  - Six control outputs allow the controller to be used in more applications
  - PID Control (when purchased with 4-20mA or pulse solid-state opto outputs)
  - Pulse Wash Timer
- For General Conductivity, pH, ORP, and Disinfection Applications:
  - Time Proportional Control
  - Pulse Proportional Control (when purchased with 4-20mA or pulse solid-state opto outputs)
  - In-range or Out-of-range activation
  - Prove wash timer
  - Time-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 other output
  - Alarm
  - PID Control (when purchased with 4-20mA or pulse solid-state opto outputs)
  - Pulse Wash Timer

W600 Series Controller Features:
- Large touchscreen display
- Universal sensor input provides extraordinary flexibility; the same controller can be used with almost any type of sensor needed
- Multiple language support allows simple setup
- 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
- Datalogging
- Emailing Alarm messages, Datalog, Graph, or System Summary reports
- Ethernet option for remote access via the Internet, LAN or Modbus/TCP
- Six control outputs allow the controller to be used in more applications
- Two virtual inputs that are calculated from two real inputs
- Flow Timer
- Lead/Lag control of up to 8 relays
- On-screen and web page graphing of sensor values and control output status

W100P Panel Mount Controller Features:
- Compact 1/4 DIN panel mount enclosure
- Universal sensor input; conductivity (contacting and electroless), amplified pH/ORP/ISE, or disinfection
- Four control outputs
- Two pH/ORP/ISE models for use with non-amplified electrodes with or without BNC connectors
- Same flexibility of each relay as the wall mount W100 controllers

W600 Series Panel Mount Controller Features:
- Large 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
- Multiple language support allows simple setup
- The third control relay allows the controller to be used in more places than other entry level products
- Optional analog (4-20 mA) output for recording, datalogging, proportional control or connection to building energy management systems
- Wall-mount package for easy installation
- Complete flexibility in the function of each relay
- For Cooling Tower or Boiler Applications:
  - Six control outputs allow the controller to be used in more applications
  - PID Control (when purchased with 4-20mA or pulse solid-state opto outputs)
  - Pulse Wash Timer
- For General Conductivity, pH, ORP, and Disinfection Applications:
  - Time Proportional Control
  - Pulse Proportional Control (when purchased with 4-20mA or pulse solid-state opto outputs)
  - In-range or Out-of-range activation
  - Prove wash timer
  - Time-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 other output
  - Alarm
  - PID Control (when purchased with 4-20mA or pulse solid-state opto outputs)
  - Pulse Wash Timer

W600 Series Metal Finishing Controller Features:
- Two sensor input slots provide extraordinary flexibility; the same controller can be used with almost any type of sensor needed
- Copper or Nickel plus pH
- Dual analog inputs for any 4-20 mA transmitter
- Universal analytical sensor card for pH/ORP/ISE, conductivity or disinfection
- Combination analog input and analytical sensor input
- Two virtual inputs that are calculated from two real inputs or one input and a constant
- Six control outputs allow the controller to be used in more applications
- Plating Control (on/off with totalizing as metal turnovers)
- Plating Timer (activate with another relay)
- Flow Timer
- Lead/Lag control of up to 8 relays
- On-screen and web page graphing of sensor values and control output status

W600 Series Cu/Ni Controllers provide reliable, flexible and powerful control for your electroless plating or etching process

Typical Applications for W900/W600/W100 Controllers:
- Wastewater Neutralization + Disinfection
- Food and Beverage Disinfection
- Potable Water Treatment
- Swimming Pools + Spas
- Cooling Tower/Boiler Control
- Metal Finishing + Printed Circuit Board
- Irrigation + Fertigation
W900 Series

The W900 Series has all the features of the W600 Series controller plus:

- Four I/O slots allow complete flexibility in adding sensors, analog inputs, and LPR corrosion sensors
- Up to 8 sensor inputs
- Up to 24 analog inputs
- Up to 16 analog outputs
- 12 digital inputs
- Eight relay control outputs
- Up to 8 virtual inputs, including calculations, redundant sensor and disturbance input
- Up to 8 virtual outputs
- Optional WiFi connection, to the LAN or to a mobile device
- Eight relay control outputs

VTouch® Remote Account Manager

VTouch is a collection of technologies designed for companies offering managed water treatment services. The VTouch solution allows service companies to more effectively manage remote accounts by significantly reducing the complexities associated with the deployment of water treatment service programs based around communicating products.

The VTouch Account Manager is fully synchronized with Walchem’s web-based controllers: the W600 and W900, as well as legacy models, making setup and configuration simple and fast. Just connect the VTouch-enabled controller to the internet through an Ethernet connection to a LAN or cellular gateway, and the controller data is sent to your VTouch account.

Additionally, the innovative, fully synchronized nature of VTouch provides you with a quick, centralized awareness of account status with the ability to Live Connect to any of your controllers in the field with one simple mouse click, regardless of connection type!

Sensors + Accessories

High quality accessories for cooling tower, boiler, potable water, and wastewater applications.

Disinfection Sensors

Amperometric disinfection sensors offer a cost-effective and reliable solution for your disinfection control requirements. We offer sensors, in varying ranges of concentrations, for free chlorine/bromine, chlorine dioxide, and hydrogen peroxide. Whether the application is cooling tower, food and beverage, drinking water, wastewater, or swimming pool, these sensors are the ideal solution.

Fluorimeters

The handheld Little Dipper is a small, lightweight and highly durable fluorimeter ideal for quick measurements in the field.

Contacting Conductivity Sensors

Contacting conductivity sensors are ideal for use in cooling towers and boilers, as well as other demanding applications, and other non-oily applications. A variety of cell constants are available to tailor a range of conductivities.

pH/ORP Sensors

Cost-effective differential pH/ORP applications for industrial and municipal applications.

Copper/Nickel Sensors

Copper/Nickel Sensors are opto-electronic on-line analyzers that provide continuous measurement and control of copper and nickel in solution. The unique optical configuration provides both the optical measurement of soluble species, or flow-through sensors that are designed for use in high-temperature processes.

Water Meters

Walchem’s WiFi Series water meters have earned a reputation for design simplicity, wide range of applications and accuracy at low-flow water. The WiFi Series uses the industry-recognized 6LoWPAN protocol, which has been adopted by many vendors of smart meters for the Internet of Things. These meters are available with either a two-wire Reed switch, or a solid state, three-wire Hall-effect sensor.

MetroMeters

MetroMeters are the most innovative and contamination-proof meters on the market today. Made of 316L stainless steel, these are the ideal solution for today’s demanding requirements associated with the deployment of in-mass, in-line remote meters, including 868/915 MHz radio-frequency technologies, and the world’s highest-capacity meter boards.

Accessories

For your complete system, Walchem provides high-quality accessories that are required for cooling tower, boiler, potable water, and wastewater applications. Walchem also offers corrosion-resistant sensors, actuators, and a variety of other accessories that are designed to be compatible with our pumps and controllers to enable our customers to provide a complete system solution.

Water Treatment Controllers

Walchem integrates its advanced sensing, instrumentation, fluid handling and communications technologies to deliver reliable and innovative solutions to the global water treatment market. Our in-house engineering is driven by quality, technology and innovation. For more information on the latest Walchem product line, visit walchem.com.
The W900 Series has all the features of the W600 Series controller plus:

- Four I/O slots allow complete flexibility in adding sensors, analog inputs, output controls, and QRM sensors
- Up to 8 sensor inputs
- Up to 24 analog inputs
- Up to 12 digital inputs
- Eight relay control outputs
- Up to 8 virtual inputs, including calculations, redundant sensor and disturbance input
- Up to 8 virtual outputs
- Optional WIFI connection, to the LAN or to a mobile device
- Eight relay control outputs

**Disinfection Sensors**

Anion-exchange disinfection services offer a cost-effective and reliable solution to your disinfection control requirements. We offer sensors, in varying ranges of concentrations, for free chlorine, bromine, ozone, peracetic acid, and other disinfecting chemicals.

- chlorine/bromine
- ozonated water
- peracetic acid

Whether the application is a cooling tower, food and beverage, drinking water, wastewater or anionizing pool, these sensors are the ideal solution.

**Fluorometers**

The Little Dipper 2 and Pyxis in-line Fluorometers are rugged, 24/7 sampling devices that provide measurement and control for environmentally sensitive applications. They can be used with data collection systems to monitor and control the level of treatment chemicals for cooling tower and boiler applications.

- Conductivity Sensors
- pH/ORP Sensors
- Temperature Sensors
- Flow Proportional Control
- Flow Meter Ratio
- Volumetric Blending
- Disturbance Variable Control

**Contacting Conductivity Sensors**

Contacting conductivity sensors are ideal for use in cooling towers and boilers, wastewater treatment, water treatment chemicals for cooling tower and boiler applications.

**Additional Relay Functions**

- Flow Proportional Control
- PPM Volume
- Target PPM
- Flow meter ratio
- Volumetric Blending
- Disturbance Variable Control

**Copper/Nickel Sensors**

Copper/Nickel Sensors are photometric on-line analyzers that are designed for copper/nickel baths and research facilities that contain more than 0.10 grams/liter (g/L) of copper or nickel.

- two-wire reed switch
- solid state, three-wire

- Electrodes

- Conductivity Sensors

- Chlorine/Dioxide Sensors

- Total Chlorine Sensors

- PPM Sensors

- Total Chlorine Sensors

- pH/ORP Sensors

- Total Chlorine Sensors

**Water Meters**

WM Series water meters have earned a reputation for design simplicity, wide range of applications and accuracy in low-quality water. The WM Series uses the rotary recognition flow principle, which has been successful in a wide variety of industries for years. These meters are available with either a two-wire read switch, or a 4-20 mA, three wire Hall-effect sensor.

**Monitoring Pumps**

The E-Class is the most innovative and cost-effective metering system on the market. Over 40 years of pump experience and a commitment to superior quality and reliability have led to development of many industry-specific models, including 800 strobe per minute technology, and the world’s highest capacity positive displacement systems.

**Accessories**

Walchem integrates its advanced sensing, instrumentation, fluid handling and communications technologies to deliver reliable and innovative solutions to the global water treatment market.

**WALCHEM®**

Walchem provides high quality accessories that are required for cleaning, testing, and other water treatment applications. We offer a variety of accessoires that are designed for our system to enable our customers to provide a complete system solution.

**WALCHEM®**

Walchem integrates its advanced sensing, instrumentation, fluid handling and communications technologies to deliver reliable and innovative solutions to the global water treatment market. Our in-house engineering is driven by quality, technology and innovation. For more information on the water Walchem product line, visit walchem.com.