WebMaster®ONE Controllers

ONE simple and flexible controller for ALL your water treatment needs!

Walchem’s WebMaster®ONE integrates advanced sensing, instrumentation, fluid handling, and data communications technologies to bring you the most advanced and sophisticated cooling tower & boiler controller in the water treatment industry.

The simple, intuitive programming makes it easy to configure your WebMaster®ONE to control multiple cooling towers, boilers, closed loops, or virtually any water treatment process. It will monitor and control based on a wide range of direct sensor inputs as well as measurement inputs from other devices such as corrosion, level, temperature and pressure.

WebMaster®ONE is on duty 24 hours a day, 365 days a year. Keeping on-site and off-site personnel informed of system performance, all the while providing comprehensive and reliable water treatment control.

**Summary of Key Benefits**

- **Easy to start-up and use** - with just a web browser!
- **VTouch®** provides quick, centralized 24/7 awareness of account status with the ability to LIVE Connect to any of your controllers in the field with one simple mouse click.
- **System status reports** and datalogs files can be sent automatically
- **Instant alarm notification via email, cell phone text message or local alarm relay**
- **Real-time set points with feed-forward**
- **Wide range of direct sensor measurements** - pH, Conductivity, ORP, Flow, Conductivity, ETC.
- **Modbus ready** is available for seamless integration with building energy management, distributed control, process management and SCADA systems.
- **Protect the building’s infrastructure while conserving water, energy and chemicals**

### Communications

WebMaster®ONE utilizes standard TCP/IP Internet communications. Remote communications can be established with WebMaster®ONE via the Internet or on a direct line with modem-to-modem capability. USB Plug and Play and Ethernet are included to allow easy remote gain to control and system operations. Multiple units of the controller are easily daisy-chained together via a direct line with modem-to-modem capability. The controller automatically detects the other controllers on the network and provides a single, centrally managed communications capability.

**ETHERNET NETWORKING**

Walchem’s Ethernet Networking allows you to leverage the power of the WebMaster®ONE communications abilities by using the Local Area Network (LAN) or by connecting the WebMaster®ONE together via Ethernet, you can access all the controllers on the network from a single browser, all at once. If a single controller includes Ethernet and the master controller requires communications, Intelligence capability is a Master/Slave type relationship: one controller is designated to be the Master or Primary controller, while the remote controllers are configured for Slave, secondary, or distributed communication roles.

Modbus TCP/IP (Ethernet) is available to seamlessly connect to building energy management, distributed control, process management and SCADA systems.
**WebMasterONE**

**Introduction**

WebMasterONE is the most advanced online process controller in the water treatment industry. It supports all global communications standards:

- **USB plug-and-play for local communications (standard feature)**
- **Ethernet for LAN communications (standard feature)**
- **Internal analog serial interface (optional)**
- **Internal cellular modem utilizing the latest global standard digital technologies (GPRS) used by most major cellular carriers (optional)**

**Flexibility**

WebMasterONE has been designed to work with WebMaster ONE, simply connect the USB cable to your laptop, open a standard web browser, and type in the WebMaster ONE default address. That’s it. You’re connected to the WebMasterONE and surfing the pages just like a website.

**Convenience**

Walchem’s patented ShoulderTap® technology (Internet Connectivity On Demand) allows WebMasterONE to be monitored and controlled from any computer, anywhere in the world, with a standard web browser, without the need to be on the Internet at all times. No proprietary software, no long distance phone charges, and it’s completely safe since the controller is only (or whenever you wish) when it’s convenient for you, or when they send reports and alarms.

**Flexibility**

WebMasterONE allows you to control cooling towers, boilers, closed loops, condensate lines, wastewater systems or any combination of the above at one site, even when they are located in different buildings!

**Versatility**

Walchem’s patented ShoulderTap® technology (Internet Connectivity On Demand) allows WebMasterONE to be monitored and controlled from any computer, anywhere in the world, with a standard web browser, without the need to be on the Internet at all times. No proprietary software, no long distance phone charges, and it’s completely safe since the controller is only (or whenever you wish) when it’s convenient for you, or when they send reports and alarms.

**Features**

- **WebLinX**
- **Gen7**
- **VTouch**
- **VTouch® Account Manager**

**Specifications**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process Control</strong></td>
<td>Supports all global communications standards.</td>
</tr>
<tr>
<td><strong>Internal Cellular Modem</strong></td>
<td>Utilizing the latest global standard digital technologies (GPRS) used by most major cellular carriers (optional).</td>
</tr>
<tr>
<td><strong>Ethernet for LAN Communications</strong></td>
<td>Standard feature.</td>
</tr>
<tr>
<td><strong>Fuse</strong></td>
<td>1.6A, 5 x 20mm.</td>
</tr>
<tr>
<td><strong>Inputs/Outputs</strong></td>
<td>Up to 8 inputs, 4 outputs (standard), up to 16 optional.</td>
</tr>
<tr>
<td><strong>Analog Outputs</strong></td>
<td>Up to 4 (standard), up to 8 optional.</td>
</tr>
<tr>
<td><strong>Serial Communication Options</strong></td>
<td>RS-232, RS-485, Ethernet, Internet.</td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>24 VDC, 150 mA.</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>0 to 50°C (32 to 122°F).</td>
</tr>
<tr>
<td><strong>Storage Temperature</strong></td>
<td>-40 to 70°C (-40 to 158°F).</td>
</tr>
<tr>
<td><strong>Humidity</strong></td>
<td>5% to 95% R.H., non-condensing.</td>
</tr>
</tbody>
</table>

**Outputs**

- **Power Supply**: Standard: 24 VDC, 150 mA. Options: 110 VAC, 220 VAC, 240 VAC, 48 VDC, 24 VDC, 12 VDC, 5 VDC, ±12 VDC, ±5 VDC, ±15 VDC.
- **Analog Outputs**: Standard: Up to 4 (optional: Up to 8). Standards: 4-20 mA, ±10 V, ±5 V, ±2 V, ±1 V, ±0.5 V, ±0.25 V, ±0.1 V. Options: 0-10 V, 0-20 mA, 0-5 mA, 0-1 mA, 0-500 mV, 0-100 mV, 0-1 V.
- **Relay Outputs**: Standard: 24 VAC, 0.25 A (per relay). Options: 24 VDC, 5 A (per relay), 12 VDC, 10 A (per relay).

**Sensors**

- **Temperature** | 0 to 200°C (32 to 392°F). |
- **ORP** | -1400 to 1400 mV. |
- **pH** | 0 to 14 pH. |
- **Contacting Conductivity** | 10 to 10,000 µS/cm. |
- **Electrodeless Conductivity** | 1000 to 10,000 µS/cm. |
- **Chlorine Dioxide** | 0 to 10 mg/l (PPM). |
- **Free Chlorine/Bromine** | 0 to 8 mg/l (PPM). |
- **Asy (High Pressure)** | 0 to 15 psi, ¾” NPTF. |
- **ORP (High Pressure)** | -1400 to 1400 mV, 32 to 158°F, 0 to 100 psi. |
- **pH (High Pressure)** | 0 to 14 pH, 32 to 275°F, 0 to 300 psi. |
- **Conductivity** | 10 to 10,000 µS/cm. |
- **ORP (High Pressure)** | -1400 to 1400 mV, 32 to 158°F, 0 to 100 psi. |
- **pH (High Pressure)** | 0 to 14 pH, 32 to 275°F, 0 to 300 psi. |

**Inputs**

- **Flow Switches** | DI_E (DI_A) Total (State). |
- **Flowmeters** | AI_4 (AI_1) Measure. |
- **Level Sensors** | AI_1 Measure (2-100%). |
- **Pressure Sensors** | AI_1 Measure (0-15 psi, ¾” NPTF, PVC, PTFE, Nylon, Isoplast, FKM). |

**Data Loggers**

- **Temp**: ±1.4 VDC (isolated). |
- **Sensors**: ±0.3 mV, 0.5 inch minimum resolution. |
- **Contacting Conductivity**: ±50% of raw reading (scalable to ppm). |
- **Electrodeless Conductivity**: ±50% of raw reading (scalable to ppm). |
- **Temperature**: ±0.1°C (±0.1°F). |
- **ORP**: ±1 mV. |
- **pH**: ±0.01 pH. |

**External Dimensions**

- **Height**: 6.8” (172.7 mm). |
- **Width**: 4.5” (114.3 mm). |
- **Depth**: 0.9” (22.9 mm). |

**Calibration**

- **Analog Inputs**: Periodic, defined time periods. |
- **Datalogs**: As an attachment to an email. |
- **Signal**: ±1.4 VDC (isolated). |
- **Sensors**: ±0.3 mV, 0.5 inch minimum resolution. |
- **Alarm**: ±50% of raw reading (scalable to ppm). |
- **Resolution**: ±50% of raw reading (scalable to ppm). |
- **Calibration**: Periodic, defined time periods. |

**Mechanical**

- **Ambient Temperature**: 0 to 49°C (32 to 120°F). |
- **NEMA Rating**: 4X. |
- **Enclosure**: Thermoplastic. |
- **Power**: 24 VDC, 500 mA. |
- **Input Protection**: Fused (1.6A, 5 x 20mm), isolated, 500 ohm maximum load, internally powered by 24 VDC. |
- **Analog Outputs**: (up to 4 optional) | R1-R4 fused together, current not to exceed 5.5 amp. |
- **RTP**: 316 SS, glass filled PP, FKM o-ring. |
- **Fuse**: 1.6A, 5 x 20mm. |
- ** inher**: 60 g (2.1 oz). |
- **Shipping Weight**: Approx. 36 lbs (16.4 kg). |

**Software**

- **VTouch**: One-click LIVE Connect to any device in the field for full view and reconfiguration. |
- ** elimination**: No need to sort out and track complicated and constantly moving cellular data or dial-up ISP plans from large companies with poor customer service and unpredictable monthly charges. 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. VTouch Account Manager is fully synchronized with Walchem’s web-based controllers, making set-up and configuration simple and fast. Just specify the type of remote communications needed for new or existing controllers and Walchem takes care of the rest. No need to sort out and track complicated and constantly moving cellular data or dial-up ISP plans from large companies with poor customer service and unpredictable monthly charges. VTouch solves these problems by simplifying the process, giving you a completely turn-key solution. The innovative, fully synchronized nature of VTouch provides you with a quick, convenient 24/7 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! No phone numbers or IP addresses to remember.

**Summary view of all monitored systems**

- **Channel**: Temperature, Flow, Pressure, Level, pH, Conductivity, ORP, PID, Inventory, Condensate, etc.
- **Alarm**: LOW, HIGH, accumulation, flow rate, pressure overrange, level low, temperature out of range, inventory low, etc.

- **System**: Analyzer, Control, Transmitter, Data Logger, etc.
- **Parameter**: Temperature, Flow, Level, pH, Conductivity, ORP, PID, Inventory, Condensate, etc.
- **Status**: Online, Offline, Active, Inactive, etc.
- **Unit**: GPM, LPM, °F, °C, psi, psig, etc.
- **Scale**: ppm, mg/l, °F, °C, psi, psig, etc.
- **Rate**: Minimum, Maximum, Average, etc.
- **Flow**: Rate, Minimum, Maximum, Average, etc.
- **Temperature**: High, Low, Range, Resolution, Calibration, etc.
- **Conductivity**: Range, Resolution, Calibration, etc.
- **ORP**: Range, Resolution, Calibration, etc.
- **pH**: Range, Resolution, Calibration, etc.
- **Level**: Range, Resolution, Calibration, etc.
- **Pressure**: Range, Resolution, Calibration, etc.
- **Inventory**: Range, Resolution, Calibration, etc.
- **Datalogs**: As an attachment to an email.
Features

Reliability
- Every part of WebMasterONE has been designed for reliable performance in any application:
  - Industrial grade pH/O2/ODI sensors
  - Rugged flow switch/ball float
  - UL, CSA and CE safety and electromagnetic performance approvals reduce electrical safety, liability concerns and dramatically reduce electrical noise and power-related field problems.

Compatibility
- True innovation has made WebMasterONE the easiest controller to use! To communicate with WebMaster ONE, simply connect the USB cable to your laptop, open a standard web browser, and type in the WebMaster default address. That's it! You're connected to WebMasterONE and surfing the pages just like a website.

Convenience
- WebMasterONE is a complete solution to control your water treatment treatments from anywhere. No need to worry about phone numbers or IP addresses to remember.
- VTouch solution allows service companies to more effectively manage remote accounts by significantly reducing the complexity associated with the deployment of water treatment service programs based around communicating costs.

Innovation
- WebMasterONE is the most advanced online process controller in the water treatment industry. It supports all global communications standards:
  - USB plug & play for local laptop communications (standard feature)
  - Ethernet for LAN communications (standard feature)
  - Internal analog input interface
  - Internal cellular modem utilizing the latest global standard digital technologies (GPRS) used by most mobile cellular carriers

Flexibility
- WebMasterONE allows you to control cooling towers, boilers, closed loops, condensate lines, wastewater systems or any combination thereof simultaneously. All standard water treatment control methods are included in every WebMasterONE. Style line, On-Off and Time Proportional Control. Inhibitor feed, intermittent boiler sampling with flashing detection, ORP control with periodic spike, and many others.

Simplicity
- WebMasterONE was made WebMasterONE for ease of use to control to communicate with WebMaster ONE, simply connect the USB cable to your laptop, open a standard web browser, and type in the WebMaster default address. That’s it! You’re connected to WebMasterONE and surfing the pages just like a website.

WebMasterONE allows you to control cooling towers, boilers, closed loops, condensate lines, wastewater systems or any combination thereof, or when it sends out reports and alarms. True innovation has made WebMasterONE the easiest controller to use! To communicate with WebMaster ONE, simply connect the USB cable to your laptop, open a standard web browser, and type in the WebMaster default address. That’s it! You’re connected to WebMasterONE and surfing the pages just like a website.

Measurement Performance

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Range</th>
<th>Temperature</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>0 to 14</td>
<td>±0.001 pH 10 Hz</td>
<td>±0.001 pH 10 Hz</td>
</tr>
<tr>
<td>ORP</td>
<td>-1400 to 1400 mV</td>
<td>±0.1 mV</td>
<td>±0.1 mV</td>
</tr>
<tr>
<td>Chlorine Dioxide</td>
<td>0 to 10 mg/l</td>
<td>±0.001 mg/l</td>
<td>±0.001 mg/l</td>
</tr>
<tr>
<td>Contacting Conductivity</td>
<td>0 to 10,000 µS/cm</td>
<td>±10 µS/cm</td>
<td>±10 µS/cm</td>
</tr>
<tr>
<td>ORP -1400 to 1400 mV</td>
<td>32 to 158°F</td>
<td>0 to 100 psi</td>
<td>1” NPTM submersion</td>
</tr>
<tr>
<td>Free Chlorine/Bromine*</td>
<td>0 to 8 mg/l (PPM)</td>
<td>0.01 mg/l</td>
<td>Single or Dual Point</td>
</tr>
</tbody>
</table>

Inputs

<table>
<thead>
<tr>
<th>Input</th>
<th>Range</th>
<th>Signal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Switch (DI_A) State</td>
<td>0 to 255 gal/h</td>
<td>Digital Input (DI)</td>
<td>Flow Switch 0 to 255 gal/h</td>
</tr>
<tr>
<td>FlowMeter4 (AI_4)</td>
<td>0 to 255 gal/h</td>
<td>Analog Input (AI)</td>
<td>Flowmeter 0 to 255 gal/h</td>
</tr>
<tr>
<td>Contact1 (DI_A) Total</td>
<td>0 to 255 gal/h</td>
<td>Digital Input (DI)</td>
<td>Contact 0 to 255 gal/h</td>
</tr>
<tr>
<td>Chlorine Dioxide (S_1) Measure</td>
<td>0 to 10 mg/l</td>
<td>Analog Output (AO)</td>
<td>Chlorine Dioxide 0 to 10 mg/l</td>
</tr>
<tr>
<td>Contacting Conductivity (AI_1) Measure</td>
<td>0 to 10,000 µS/cm</td>
<td>Analog Input (AI)</td>
<td>Contacting Conductivity 0 to 10,000 µS/cm</td>
</tr>
<tr>
<td>pH (DI_A)</td>
<td>0 to 14</td>
<td>Analog Input (AI)</td>
<td>pH 0 to 14 pH</td>
</tr>
<tr>
<td>ORP (A_3)</td>
<td>-1400 to 1400 mV</td>
<td>Analog Input (AI)</td>
<td>ORP -1400 to 1400 mV</td>
</tr>
<tr>
<td>Chlorine Dioxide (S_1) Measure</td>
<td>0 to 10 mg/l</td>
<td>Analog Input (AI)</td>
<td>Chlorine Dioxide 0 to 10 mg/l</td>
</tr>
<tr>
<td>Contacting Conductivity (AI_1) Measure</td>
<td>0 to 10,000 µS/cm</td>
<td>Analog Input (AI)</td>
<td>Contacting Conductivity 0 to 10,000 µS/cm</td>
</tr>
</tbody>
</table>

Outputs

<table>
<thead>
<tr>
<th>Output</th>
<th>Range</th>
<th>Signal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen7 (S_3) Measure</td>
<td>50 psi @ 140°F</td>
<td>Analog Output (AO)</td>
<td>Gen7 50 psi @ 140°F</td>
</tr>
<tr>
<td>HP 1000 (S_2) Measure</td>
<td>55 mg/l</td>
<td>Analog Output (AO)</td>
<td>HP 1000 55 mg/l</td>
</tr>
<tr>
<td>ABC Industrial - Chiller Room HP 1000 (S_2) Measure</td>
<td>55 mg/l</td>
<td>Analog Output (AO)</td>
<td>HP 1000 55 mg/l</td>
</tr>
<tr>
<td>ABC Industrial - Chiller Room Gen7 (S_3) Measure</td>
<td>50 psi @ 140°F</td>
<td>Analog Output (AO)</td>
<td>Gen7 50 psi @ 140°F</td>
</tr>
</tbody>
</table>

VTouch® Account Manager

Summary view of all monitored systems

- On-line, web-based summary of account status
- Processes values continuously updated including past 24 hour min, max and average values
- Alarm status
- One-click LIVE Connect to any device in the field for full view and reconfiguration
- Analysis, troubleshooting, adjustments
- Seamlessly integrate devices according to a process, facility, customer, etc.
- User “access” and “permissions” management
- Enabled during VTouch sessions through ‘vtouch’
- Makes service PROJECTIVE ret reactive
- SAVES TIME! Plan & Simple
- The most advanced 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 complexity associated with the deployment of water treatment service programs based around communicating costs.

The VTouch Account Manager is fully synchronized with WebMaster’s web base controllers, making set-up and configuration simple and fast. Just specify the type of remote communications needed for new or existing controllers and WebMaster takes care of the rest. No need to sort out cost and trial complicated and constantly moving cellular data or dial-up ISP plans from large companies with poor customer service and unpredictable monthly charges. VTouch solves these problems by bundling the communications services, giving you a completely turn-key solution.

The innovative, fully synchronized nature of VTouch provides you with a quickly, convenient 24/7 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! No phone numbers or IP addresses to remember.
Walchem, Iwaki America Inc.
Five Boynton Road  Hopping Brook Park  Holliston, MA  01746  USA  Phone: 508-429-1110   www.walchem.com

WebMaster® ONE Controllers

ONE simple and flexible controller for ALL your water treatment needs!

Walchem’s WebMaster®ONE integrates advanced sensing, instrumentation, fluid handling, and data communications technology to bring you the most an ticipating a cooling tower & boiler controller in the water treatment industry.

The simple, intuitive programming makes it easy to configure your WebMaster®ONE to control multiple cooling towers, boilers, chilled loops, or virtually any water treatment process. It will monitor and control based on a wide range of direct sensor inputs as well as measurement inputs from other devices such as corrosion, level, temperature and pressure.

WebMaster®ONE is on duty 24 hours a day, 365 days a year. Keeping on-site and off-site personnel notified of system performance, all the while providing comprehensive and reliable water treatment control.

Summary of Key Benefits

• Extensive built-in Plug & Play communications options:  Ethernet  USB Sticks (w/dish support)
• Cell modem  Landline modem
• Easy to start-up and use - with just a web browser!
• V’Touch provides quick, central 24/7 awareness of account status with the ability to LIVE Connect to any of your controllers in the field with one simple mouse click.
• System status reports and dialogs can be sent automatically
• Instant alarm notification via email, cell phone text message or local alarm relay
• RPT-30 set points with feed verification
• Wide range of direct sensor measurements:  pH  Conductivity  Electrodes/Conductivity
• Flow/Pressure/Temperature/Flame/Burner
• Modbus read/write is available for seamless integration with building energy management, distributed process management and SCADA systems
• Protect the building’s infrastructure while conserving water, energy and chemicals

Cooling Tower/Boiler Controllers

With an enabled web server, WebMaster®ONE utilizes standard TCP/IP Internet communications. Remote communications can be established with WebMaster®ONE via the Internet or on a direct wire with modem to modem capability. USB Plug and Play and Ethernet are included to allow easy integration for plant personnel and system operators. Multiple units can be networked as a controller simultaneously. A graduated password protection system allows users varied degrees of access from view only to full system configuration. In addition, WebMaster®ONE delivers a range of user-friendly information reporting tools including email notifications for dataloggers, alarms and system summaries.

Walchem has made use of the Internet as a remote access communications platform for industrial control equipment a practical reality. While others attempt to replace the cost of embedded web server handshakes, Walchem has solved the problem of the high cost and lack of availability of a standard Internet connection.

WebMaster®ONE makes programming your cooling tower or boiler simple and fast and WebMaster®ONE does not require any proprietary software to ease your computer. Setup and programming are all done via a standard web browser.

There is a complete setup menu and system set-up screens make programming user friendly and intuitive. Once WebMaster®ONE is installed, the Start-up program jump-starts you through the top level set-up. The Input, Output and utility menus guide you through the rest of the programming.

WebMaster®ONE offers all the components of an advanced industrial controller, with the power and flexibility to provide you with a single controller for ALL your water treatment needs!

ETHERNET NETWORKING

Walchem’s Ethernet Networking allows you to leverage the power of the WebMaster®ONE communications capabilities. By using the local area network (LAN) or by connecting the WebMaster®ONE controller via Ethernet, you can access all the controllers on the network from a single location. If needed, you can even connect to the network from a remote location using a web browser. WebMaster®ONE controllers are Ethernet enabled and can be configured to operate as a Master or window to all the other units (Slaves) on the network.

By utilizing the existing LAN, Ethernet can be cost effective-

Modbus TCP/IP (Ethernet) is available to seamlessly connect to building energy management, distributed control, process management and SCADA systems.

- USB Plug and Play:  For local monitoring and reconfiguration of your WebMaster®ONE controller via the Internet or on a direct line with modem-to-modem capability. USB Plug and Play is simple and flexible.
- Ethernet:  For remote monitoring and reconfiguration of your WebMaster®ONE controller via the Internet or on a direct line with modem-to-modem capability.
- Cellular:  For monitoring and reconfiguration of your WebMaster®ONE controller via the Internet or on a direct line with modem-to-modem capability.
- LAN:  There is a complete setup menu and system set-up screens make programming user friendly and intuitive. Once WebMaster®ONE is installed, the Start-up program jump-starts you through the top level set-up.
- WebAlert®:  WebAlert® delivers a range of user-friendly information reporting tools including email notifications for dataloggers, alarms and system summaries.
- System Summary:  The simple, intuitive programming makes it easy to configure your WebMaster®ONE to control multiple cooling towers, boilers, chilled loops, or virtually any water treatment process. It will monitor and control based on a wide range of direct sensor inputs as well as measurement inputs from other devices such as corrosion, level, temperature and pressure.

WebMaster®ONE is on duty 24 hours a day, 365 days a year. Keeping on-site and off-site personnel notified of system performance, all the while providing comprehensive and reliable water treatment control.

Summary of Key Benefits

• Extensive built-in Plug & Play communications options:  Ethernet  USB Sticks (w/dish support)
• Cell modem  Landline modem
• Easy to start-up and use - with just a web browser!
• V’Touch provides quick, central 24/7 awareness of account status with the ability to LIVE Connect to any of your controllers in the field with one simple mouse click.
• System status reports and dialogs can be sent automatically
• Instant alarm notification via email, cell phone text message or local alarm relay
• RPT-30 set points with feed verification
• Wide range of direct sensor measurements:  pH  Conductivity  Electrodes/Conductivity
• Flow/Pressure/Temperature/Flame/Burner
• Modbus read/write is available for seamless integration with building energy management, distributed process management and SCADA systems
• Protect the building’s infrastructure while conserving water, energy and chemicals
WebMasterONE supports many of the most popular global communications standards:

- Compatibility
  - Proportional Control, Inhibitor feed, Intermittent boiler sampling with flashing detection, ORP control with periodic spike, and many others.

Only connected to the Internet when you request it, or when it sends out reports and alarms.

Walchem’s patented ShoulderTap® technology (Internet Connectivity On Demand) allows WebMasterONE to be monitored and controlled over the Internet from any computer, anywhere in the world, with a standard web browser, without the need to be on the Internet at all times. No proprietary software, so no long distance phone charges, and it’s completely safe since the controller is only connected to the Internet when you request it, or when it sends out reports and alarms.

WebMasterONE allows you to control loading towers, balers, clamped bags, condensate lines, wastewater systems or any combination of use cases. All standard version control treatment methods are included in every WebMasterONE. Balusters, On-Off and Timed Proportional Control, Inhibitor feed, intermittent boiler sampling with flashing detection, ORP control with periodic spike, and many others.

WebMasterONE was designed with enterprise scalability in mind to address multiple applications, and the monitoring and control of multiple processes at one time.

WebMasterONE simplifies installation with USB plug-n-play for local laptop communications (standard feature). UL, CSA and CE safety and electromagnetic performance approvals reduce electrical safety liability concerns and dramatically reduce electrical noise and powerline related field problems.

Reliability

- Every part of WebMasterONE has been designed for reliable performance in any application.
- Industrial grade pH/ORP/COD sensors
- Rugged flow switch/monitor
- UL, CSA and CE safety, and electromagnetic performance approvals reduce electrical safety liability concerns and dramatically reduce electrical noise and powerline related field problems.

Features

- USB plug-n-play for local laptop communications (standard feature)
- Ethernet for LAN communications (standard feature)
- Internet connectivity on demand (optional)
- Internal cellular modem utilizing the latest global standard digital technologies (GPRS) used by most major cellular carriers

True innovation has made WebMasterONE the easiest controller to use! To communicate with WebMasterONE simply connect your computer to the controller with a standard USB cable. No lengthy set-up required!

Measurement Performance

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Temperature</th>
<th>Humidity</th>
<th>Pressure</th>
<th>Measurement</th>
<th>Temperature</th>
<th>Humidity</th>
<th>Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>0 to 16°C</td>
<td>0 to 100%</td>
<td>0 to 300 kPa</td>
<td>1 mV at 25°C</td>
<td>0 to 16°C</td>
<td>0 to 100%</td>
<td>0 to 300 kPa</td>
</tr>
<tr>
<td>ORP</td>
<td>-2000 to 2000 mV</td>
<td>0 to 100%</td>
<td>0 to 300 kPa</td>
<td>1 mV at 25°C</td>
<td>0 to 16°C</td>
<td>0 to 100%</td>
<td>0 to 300 kPa</td>
</tr>
<tr>
<td>Conductivity</td>
<td>10 to 10,000 µS/cm</td>
<td>0 to 100%</td>
<td>0 to 300 kPa</td>
<td>1 µS/cm ±50% of raw reading (scalable to ppm)</td>
<td>0 to 16°C</td>
<td>0 to 100%</td>
<td>0 to 300 kPa</td>
</tr>
</tbody>
</table>

VTouch® Account Manager

- ‘Smart’ Services:
  - On-line, web-based summary of account status
  - Processes continuously updated including past 24 hour min, max and average values
  - Alarm status
  - One-click LIVE Connect to any device in the field for full view and reconfiguration

- Analysis, troubleshooting, adjustments
- Seamlessly integrates devices according to a process(es), facility, customer, etc.
- User “access” and “permissions” management
- Error logging during “virus” epemics
- Multiple server PROACTIVE net reactive

SAVES TIME! Plan & Simple

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

The VTouch Account Manager is fully synchronized with Walchem’s web based controllers, making set-up and configuration simple and fast. Just specify the type of remote communications needed for new or existing controllers and Walchem takes care of the rest. No need to sort out and track complicated and constantly moving control data or dial-up ISP plans from large companies with poor customer service and unpredictable monthly charges. VTouch solves these problems by providing a unique feature rich account summary, giving you a completely turnkey solution.

The innovative, fully synchronized nature of VTouch provides you with a quick, centralized 24/7 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! No phone numbers or IP addresses to remember.

Summary view of all monitored systems
Walchem’s WebMaster®ONE Controller integrates advanced sensing, instrumentation, fluid handling, and data communications technologies to bring you the most sophisticated cooling tower & boiler controller in the water treatment industry.

The simple, intuitive programming makes it easy to configure your WebMaster®ONE to control multiple cooling towers, boilers, chilled loops, or virtually any water treatment process. It will monitor and control based on a wide range of direct sensor inputs as well as measurement inputs from other devices such as corrosion, level, temperature and pressure.

WebMaster®ONE is on duty 24 hours a day, 365 days a year. Keeping on-site and off-site personnel notified of system performance, while providing comprehensive and reliable water treatment control.

Summary of Key Benefits

- Extensive built-in Plug & Play Communications options:
  - Ethernet
  - USB (USB Flash data support)
  - Cell modem
  - Landline modem
- Easy to set up and use - with just a web browser!
- tTouch! provides quick, central 24/7 awareness of account status with the ability to LIVE Connect to any of your controllers in the field with one simple mouse click.
- System status reports and报警 files can be sent automatically
- Instant alarm notification via email, cellular phone text message or local alarm relay
- RPT set points with feed verification
- Wide range of direct sensor measurements:
  - pH
  - Conductivity
  - Electrodeless conductivity
- Flow/flow/level
- Modbus ready/nila is available for seamless integration with building energy management, distributed control process management and SCADA systems
- Protect the building’s infrastructure while conserving water, energy and chemicals

Communications

Ordering Information

WebMaster®ONE Controllers

ONE simple and flexible controller for ALL your water treatment needs!

With an embedded web server, WebMaster®ONE utilizes standard TCP/IP Internet communications. Remote communications can be established with WebMaster®ONE via the Internet or on a direct line with modern-modem capability. USB Plug and Play and Ethernet are included to allow easy installation on site, plant personnel and system operators. Multiple users can access controller simultaneously. A graduated password protection system allows users varied degrees of access from view only to full system configuration.

WebMaster®ONE delivers a range of user-friendly information reporting tools including email notifications for data alerts, alarms, and system parameters.

Walchem has made use of the latest technology in a remote access communications platform for industrial control equipment a practical reality. While others attempt to replace the lost art of embedded web site development, Walchem has solved the problem of the high cost and lack of availability of a solution in China and India.

WebMaster®ONE makes programming your cooling tower or boiler simple and fast and WebMaster®ONE does not require any proprietary software to use with your computer. Set-up is as simple as logging on to a standard web browser. Easy-to-use menus and system set-up screens make programming user-friendly and intuitive. Once WebMaster®ONE is installed, you’ll be up and running in hours.

If your needs require more robust monitoring and control, WebMaster®ONE offers Modbus TCP/IP (Ethernet) for seamless integration with building energy management, distributed control, process management and SCADA systems.

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