# microFLEX

## Single Boiler/Condensate Controller

A Powerful Controller Integrating built-in diagnostics with realtime monitoring in a compact design.

AQUATRAC’s microFLEX single boiler/condensate controller is the perfect economical solution providing the latest in water management technology.

### Standard Features

- Boiler or Condensate Conductivity Input
- Single Water Meter Input
- Boiler Status Input
- Chemical Feed Input
- 5 Key Universal Keypad
- 2 Line, 16 Character Backlit Display
- Boiler Blowdown or Condensate Diverter Relay (solenoid valve or motorized ball valve)

### MicroFlex Advantages & Benefits

- **Selectable Chemical Feed Mode:**
  Provides 3 feed modes; feed on volume, blowdown & feed and percentage time.

- **Conductivity Control:**
  Can be programmed using timed or continuous sampling.

- **Water Meter Input:**
  Allows for chemical to be fed based on water volume versus timed pump control methods generally found on comparably priced controllers.

- **What and Why Information:**
  Diagnostics shown on display are a valuable troubleshooting tool. Conductivity valve and chemical pump relays show complete status. Shows WHY the relay is on/off.

- **Single Point Calibration:**
  For ease of start up and operation. Warning message immediately detects fouled or faulty sensors.

- **Controller Run Time:**
  Gives total hours per day and total operating days since initial installation.

- **Robust Diagnostics:**
  Provides complete 24 hour history of blowdown valve operation and chemical relay timing intervals.

- **Keypad Password:**
  Eliminates unauthorized adjustments.

- **Communication Options:**
  Includes Ethernet networking, dry contact alarm relay or 4-20mA output on conductivity.

- **Optional Web Browser User Interface with Networking Capability:**
  Provides ability to direct connect to the controller from a portable workstation, such as a laptop computer. Can also view critical processes remotely through the use of a LAN. View our live boiler demo at http://66.146.13.223.
# microFLEX

## Single Boiler/Condensate Controller

### Experts in Chemical Feed and Water Treatment

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### Specifications

<table>
<thead>
<tr>
<th>Rating—Detail</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analog-Digital I/O</strong></td>
<td></td>
</tr>
<tr>
<td>Conductivity Sensor</td>
<td>Auto ranging from 100uS to 10,000uS, rated 250psi</td>
</tr>
<tr>
<td>Water Meter Input</td>
<td>400Hz, 0.5mA @5VDC measurement current</td>
</tr>
<tr>
<td>Relay Outputs</td>
<td>1 SPST (Chemical feed), 1 SPDT (Bleed)</td>
</tr>
<tr>
<td>4-20mA Output (optional)</td>
<td>Single DC isolated, loop powered</td>
</tr>
<tr>
<td>Alarm Relay (optional)</td>
<td>500mA @ 24VDC dry contact set, un-fused</td>
</tr>
<tr>
<td><strong>Communications User Interface</strong></td>
<td></td>
</tr>
<tr>
<td>Keypad—LCD</td>
<td>5 key tactile feedback, universal characters</td>
</tr>
<tr>
<td>2 line x 16 character, backlit</td>
<td>User adjustable contrast</td>
</tr>
<tr>
<td>10Base T, TCP/IP Ethernet LAN (optional)</td>
<td>HTML, Micro Web Server with user definable IP address</td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
</tr>
<tr>
<td>Relay ON/OFF</td>
<td>Captured sample &amp; ON/OFF control</td>
</tr>
<tr>
<td>Volumetric feed</td>
<td>User set, measure volume &amp; pump on time</td>
</tr>
<tr>
<td>Interlocking</td>
<td>Contact set input</td>
</tr>
<tr>
<td>Alarms—Feed limit timer</td>
<td>Minutes per day</td>
</tr>
<tr>
<td><strong>System</strong></td>
<td></td>
</tr>
<tr>
<td>Electrical</td>
<td>120VAC, 60 Hz</td>
</tr>
<tr>
<td>Fusing</td>
<td>5 Amps @ 120VAC</td>
</tr>
<tr>
<td>Surge Suppression</td>
<td>Relay 2 N.O. contacts snubbed @ 0.1uF, 150 ohm</td>
</tr>
<tr>
<td>Accessory Power</td>
<td>15-22VDC, Unregulated, Thermally Fused @ 50mA</td>
</tr>
<tr>
<td>Enclosure</td>
<td>Non-metallic, NEMA4X</td>
</tr>
<tr>
<td>(150mm W x 150mm H x 90mm D)</td>
<td></td>
</tr>
<tr>
<td><strong>Certifications</strong></td>
<td></td>
</tr>
<tr>
<td>CSA, CE, UL</td>
<td>CSA tested to comply with UL</td>
</tr>
</tbody>
</table>

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### Communications

#### BB-IN

**Single Boiler Conductivity Control & Timed Chemical Feed***
Timed sampling boiler blowdown conductivity control, feed water meter

#### CM-AH

**Condensate Monitor and Bypass valve controller***
User set bypass valve ON/OFF conductivities

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**M2B-BB-IN-CL**
(Example Only)

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**CL**

**4-20mA Out on Conductivity **
Fully isolated output, loop powered. Keypad adjustable 4-20mA levels

**LB**

**Ethernet Networking **

**AR**

**Alarm Contact **

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