microFLEX
Single Boiler Controller

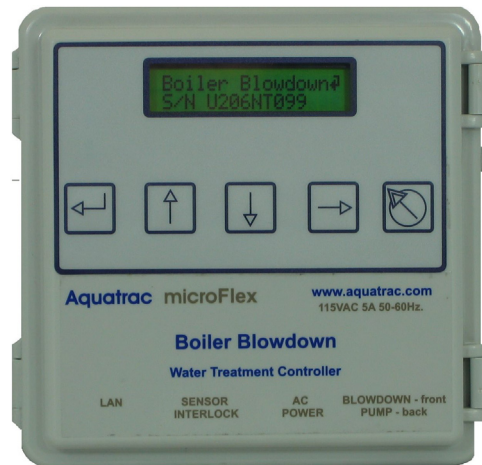## Everything you get in other small boiler controllers ...and much more

Aquatrac's microFLEX single boiler controller is the perfect economical solution that provides the latest in water management technology.

A Powerful Controller in a Compact Design

Integrating built-in diagnostics with real-time monitoring in a compact design.

Timed Pump Control

Timed or Continuous Sample Boiler Blowdown and Chemical Relay Timer

Boiler Blowdown↑
S/N U206NT099

Aquatrac microFlex
www.aquatrac.com
115VAC 5A 50-60Hz.
Boiler Blowdown
Water Treatment Controller

LAN   SENSOR   AC   BLOWDOWN - front
       INTERLOCK   POWER   PUMP - back

Standard Features

Boiler Conductivity Input
Water Meter Input
Boiler Status Input
5 Key Universal Keypad
2 Line, 16 Character Display

Sensor Included

Communications Options
(Option of one of the following)

● **microFLEX Web Browser User Interface (UI)**
Ability to program controller via Web Browser. No additional software necessary.

Network accessible with a built-in Ethernet complete with user defined Static IP.

● **Dry Contact Alarm Relay**

● **Single 4-20 mA Output**

AQUATRAC™
INSTRUMENTS, INC.
SYSTEM DESIGN & ENGINEERING

Features & Benefits Overview

microFLEX Features	Advantages & Benefits
Displays "What and Why" Information	Ensures that the user is aware of what the controller is doing 24-hours a day. Blowdown valve status (on or off) and timing intervals are viewable at a glance.
Most Recent 24-Hour Diagnostics	Know at a glance if the water treatment system is working as expected. Provides complete 24-hour history of blowdown cycles and chemical feed; as well as minimum and maximum temperatures.
Networking Capability	Ability to view critical processes remotely through the use of a LAN.
Water Meter Volumes	Provides the option of feeding the chemical based on water volume versus the timed pump control methods generally found on comparable-priced controllers. Ability to verify Softener Effluent or Feed Water volume. Displays 24-hour volume as well as annual volume.
Controller Run-Time Information	Ability to see total hours powered per day and total operating days since initial installation. Stores runtime information that helps to determine if controller has been powered down or disconnected for any length of time.
User Password Controls	Eliminate unauthorized or accidental set point or feed mode changes. User password reset capability without on-site vendor intervention.
AquaTrac Flex-Library	AquaTrac's Flex-Library provides valuable information that is accessible 24-hours a day on our website. Utilize this system to search a knowledge base of information based on reference numbers displayed on the controller keypad.
Simple Calibration	Single point calibration for ease of start up and operation. Warning message immediately detects fouled or faulty sensors.
Metric Switch	Option to use US or Metric units of measurement.
Optional Web Browser User Interface	Web browser control allows you to directly connect to the controller from a portable workstation, such as a laptop computer. No software to install, no updates to perform. View our live demo at, http://66.146.13.223.

Complete your controller package using the recommended accessories available through Aquatrac

- Part # HWMP.75 – ¾" Paddlewheel Water Meter Sensor, 304 stainless steel, supplied in carbon steel 'T', 240F Max

- Part # HWMP1 – 1" Paddlewheel Water Meter Sensor, 304 stainless steel, supplied in carbon steel 'T', 240F Max

- Part # BDV-ST – ½" Solenoid valve with ¾" sensor cross & calibrated ½" throttling valve rated to 100PSI steam

- Part # BDV-MT – ½" 120VAC Motorized Ball Valve, ¾" sensor cross & ½" throttling, needle valve rated to 250PSI steam

System Information

NEMA4X Enclosure
120VAC, 60Hz
Umbilical Plug Connections

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In the US call toll-free at:
800.909.9283
Visit our online catalog at:
http://www.aquatrac.com

Specifications

	Rating—Detail	Notes
Analog-Digital I/O		
Conductivity Sensor	Auto ranging from 100uS to 10,000uS, Rated 250psi	Single point calibration
Water Meter Input	400Hz, 0,5mA @5VDC Measurement Current	Accepts Paddlewheel or Contacting Head
Relay Outputs	1 SPST (Chemical Feed), 1 SPDT (Bleed)	**Single controller fuse**
4-20mA Output (optional)	Single DC Isolated, Loop Powered	**User definable span, Alarms on Open Loop**
Alarm Relay (optional)	500mA @ 24VDC Dry Contact set, un-fused	**Normally Closed Contact, open on alarm**
Communications User Interface		
Keypad—LCD	5 Key Tactile Feedback, Universal Characters	Scan rate 100 mS nominal
	2 Line x 16 Character, Backlit	User adjustable contrast
10Base T, TCP/IP Ethernet LAN (optional)	HTML, Telnet Micro Web Server with	User Definable Static IP
	User definable IP address & port	Browser shows controller in real time
Controls		
Relay ON/OFF	ON/OFF control	Relay 1 Chemical Feed, Relay 2 Bleed Valve
Volumetric	User set, measure volume & pump on time	
Interlocking	Contact set input	Relay OFF when contact set opens
Alarms—Feed Limit Timers	Minutes per Actuation & Minutes per Day	User defined on Feed Limit
System		
Electrical	120VAC, 60 Hz	
Fusing	5 Amps @ 120VAC	
Surge Suppression	Relay 2 N.O. Contacts snubbed @ 0.1uF	Varistor on AC Line Input
Accessory Power	15-22VDC, Unregulated, thermally fused @ 50mA	
Enclosure	Non-Metallic, NEMA4X	5.9"W x 5.9"H x 3.5"D (150mm W x 150mm H x 90mm D)
Certifications		
CSA: Pending	CSA tested to comply with CE (Pending)	CSA tested to comply with UL, (Pending)

BB-IN **Single Boiler Conductivity Control & Timed Chemical Feed**
Timed Sampling Boiler Blowdown Conductivity Control, Make-up water meter input

CL **4-20mA Out on Conductivity ***
Fully isolated output, Loop Powered. Keypad adjustable 4 & 20mA levels

LB **Ethernet Networking ***

AR **Alarm Contact ***

M2B-BB-IN-CL

* Select only one communication option, LB, CL or AR. If desired.
Communications options can not be combined.

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