

microFLEX

Single Cooling Tower Controller

A cooling tower controller that combines the latest technology with an economical solution.

Only available from Aquatrac, our breakthrough design offers a worry-free thermal flow switch that does not require any user adjustments!

A Powerful Controller in a Compact Design

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

Selectable Inhibitor Feed Modes

Make-Up Water Volume
Bleed then Feed
Percentage Time and Bleed & Feed



Standard Features

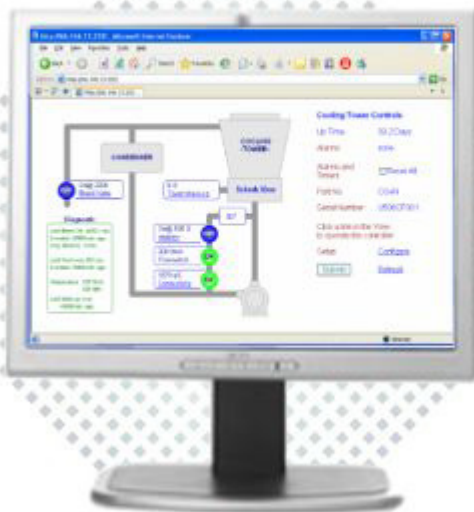
Tower Conductivity Input
Water Meter Input
Flow Switch Status Input
5 Key Universal Keypad
2 Line, 16 Character Display



Combination conductivity / thermal flow sensor

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**



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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. Solenoid 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 bleed 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 cycles, detect leaks in the condenser system & accurate inhibitor feed based on make-up 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.
Relay Run Times	Displays past 24-hour history of the chemical pump run times.
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://66.146.13.222 .

Complete your controller package using the recommended accessories available through Aquatrac

- Part # WM.75 - ¾" Contacting Head Meter, 1 GPC, ¾" FNPT
- Part # WM1 - 1" Contacting Head Meter, 10 GPC, 1" FNPT
- Part # SV-1/2 - ½" Solenoid Valve, zero PSI differential, 150PSI maximum
- Part # SV-3/4 - ¾" Solenoid Valve, zero PSI differential, 150PSI maximum

System Information

NEMA4X Enclosure
120VAC, 60Hz
Umbilical Plug Connections

AQUATRAC™
INSTRUMENTS, INC.
SYSTEM DESIGN & ENGINEERING

In the US call toll-free at:
800.909.9283

Visit our online catalog at:
<http://www.aquatrac.com>

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Specifications

	Rating—Detail	Notes
Analog-Digital I/O		
Conductivity Sensor	Auto ranging from 100uS to 10,000uS	Single point calibration, Temperature Compensated
Temperature Sensor	32F to 125F (0C to 50C)	Displayed as F or C
Thermal Flow Switch	1GPM trip within 30 Seconds	Typically 10 Second trip with in FLOW / NO FLOW
Water Meter Input	400Hz, 0,5mA @5VDC Measurement Current	Accepts Paddlewheel or Contacting Head
Relay Outputs	1 SPST (Inhibitor), 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 or DHCP
	User definable IP address & port	Browser shows controller in real time
Controls		
Relay ON/OFF	ON/OFF control	Relay 1 Inhibitor, Relay 2 Bleed Valve
Volumetric	User set, measure volume & pump on time	Sequential control, measures make-up volume then bleeds for user set volume
Interlocking	Flow Switch contact set input	Relay OFF when contact set opens
Blocking	Bleed relay may block upon activation of Inhibitor relay	
Alarms—Feed Limit Timers	Minutes per Actuation & Minutes per Day	User defined on Feed Limit
System		
Electrical	120VAC, 50/60 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)

CO-IN Conductivity Control, Selectable Inhibitor Feed & Thermal Flow Sensor

Conductivity Sensor includes an 3/4" SCH40 PVC Threaded 'T', 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 ***

M2T-CO-IN-CL

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

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