

PULSAFEEDER®

Cooling Tower Controllers



MicroTrac
MicroVision

Pulsafeeder Expertise

Technology is the key to delivering responsible products to the markets that we serve. Leading the way in the development of metering technologies, Pulsafeeder continues to set the standard for accuracy, reliability and safety.

Innovation is another hallmark of Pulsafeeder. Helping customers find a new approach to an old problem is what we do best.



Model Specific QR Code

Pulsafeeder assists everyone in the field with information for **THAT SPECIFIC PRODUCT**, quickly and easily. No dedicated app needed. Simply use your QR Reader on your smart phone or tablet and scan the QR Code located on the Pulsafeeder product label, either Pump or Controller.

- Identify - Model Number, Serial number, KOPkit (Repair Kit)
- View - Quickly find product information such as parts list, IOM, tech sheet and more
- Contact - Call or email Tech Support immediately to assist you
- Email - Send this information to yourself or someone else, to save or even view later



Cooling Tower Controller Technology

Pulsafeeder's line of Cooling Tower Controllers are designed for simplicity and reliability. Offering affordable, high performance MicroVision and MicroTrac Controllers are specifiable and intuitive. Pulsafeeder Cooling Tower Controllers provide you the control of your cooling tower system, with the ability to accurately control the level of dissolved solids, conductivity, makeup, corrosion inhibitor, biocide chemicals, feed inhibitor and much more. With multiple control options available in Pulsafeeder Cooling Tower Controllers we are sure to have a unit to fit your Cooling Tower needs.

Toroidal Sensor Technology

Featuring innovative toroidal sensor technology, the MicroVision and MicroTrac Cooling Tower controllers provide an economical control platform that is not susceptible to sensor fouling and never requires calibration! The toroidal conductivity sensor is factory calibrated for the life of the probe eliminating routine calibrations which saves you valuable service time and money. By design, Pulsafeeder's toroidal conductivity sensor features no exposed electrodes this eliminates cleaning of the sensor, downtime, and erroneous conductivity readings. When installed according to the manufacturer's instructions, the need for routine sensor removal and cleaning is virtually eliminated.

Standard Sensor Specifications

- Maximum Temperature: 122°F / 50°C
- Temperature Compensation Range : 32°F - 122°F / 0°C - 50°C
- Maximum Pressure: 125 PSI (8.6 BAR)
- Sensor Type: Toroidal
- Cable Length, Standard: 15' / 4.5 m
- Cable Length, Maximum: 750' / 228.6 m
- Materials of Construction: Virgin Polypropylene



Features & Benefits



Simple Programming

- Soft keys touch pad programming
- Intuitive menus make program adjustments easy & understandable

Easy Installation and Easy to Use

- Pre-wired and conduit connection options make easy installation
- Large graphical display
- LED function indicators
- Touch pad program keys provide clear and precise system information



Toroidal Probe

- No calibration required
- Reduced potential for fouling
- Factory calibrated

Heavy Duty Enclosure

- NEMA 4X rated
- Easy Installation



MicroTrac Features & Benefits



Timers

- Water meter pulse timer
- Percent timer
- % Post bleed timer
- Limit timer

Selectable Set Point

- Rising
- Falling
- Open or closed loop control



MicroVision Features & Benefits



Selectable Timers

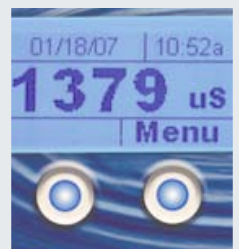
- Limit
- Percent
- % Post bleed with limit
- Water meter
- Dual biocide timers

Digital Inputs

- Flow switch
- 3 Drum level
- Dry contact water meter
- Hall effect

Outputs

- 4-20 mA isolated analog
- Dry contact alarm
- Bleed (Solenoid valve or motorized ball valve)



MicroTrac Cooling Tower Controller

The MicroTrac is a microprocessor based feed and bleed, toroidal conductivity controller designed to control conductivity and feed inhibitor in cooling tower systems. Featuring innovative toroidal sensor technology, the MicroTrac provides an economical control platform that is not susceptible to sensor fouling and never requires calibration!

The MicroTrac measures the conductivity of the cooling tower recirculating water via a toroidal conductivity sensor. The controller activates two independent relay outputs based on bleed and a selectable feed mode of operation. The MicroTrac conductivity controller has a 0 - 9,999 $\mu\text{S}/\text{cm}$ range, making it ideal for other applications as well, such as rinse, industrial process, wastewater, etc.

Controller Specifications

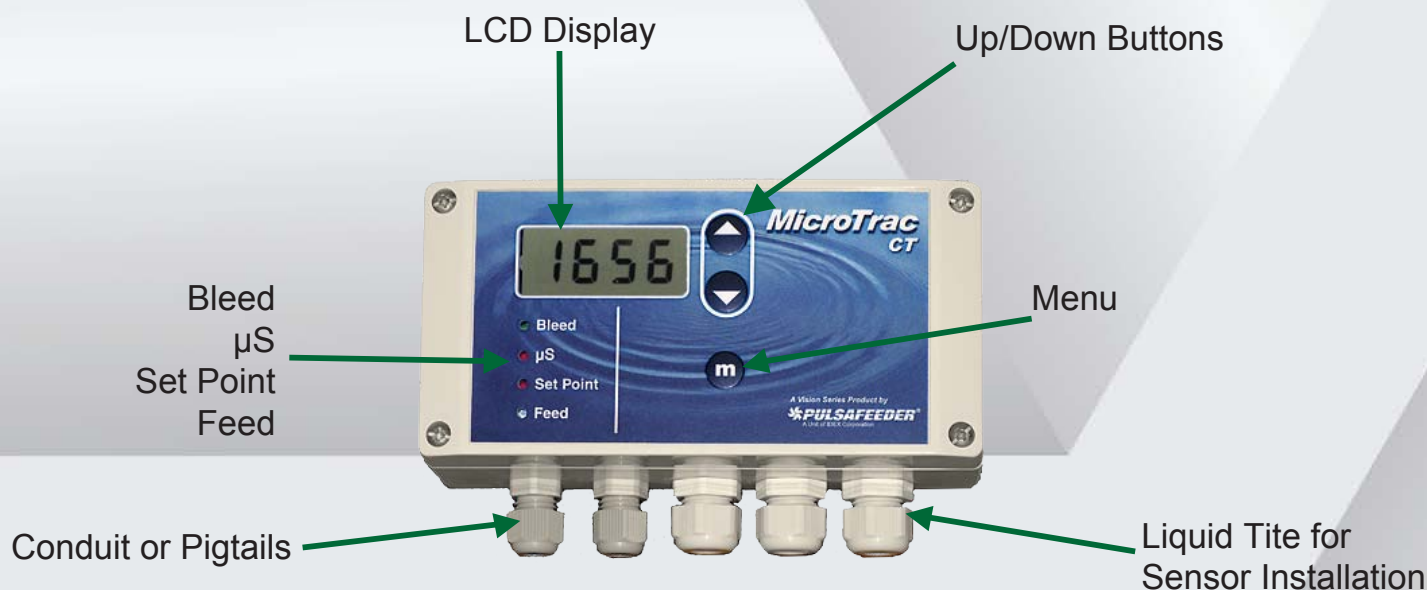
- Enclosure: NEMA 4X / IP65
- Dimensions: 6.44 x 3.2 in (163 x 82 mm)
- Power Supply:
90 VAC / 50/60Hz / 5A;
250 VAC / 50/60Hz / 5A
- Control Output:
Line Voltage @240VA per Relay
(2 Amps @ 120VAC)
- Display: LCD
- Set Point Range: 0 – 9,999 $\mu\text{S}/\text{cm}$
- Set Point Differential (Hysteresis):
Fixed 5% below the set point

Flow Switch Specifications

- Max. Temp: 122°F (50°C)
- Max. Pressure: 125 PSI (8.6 BAR)
- Activate Flow Rate:
Approximately 1 GPM / 3.78 LPM
- Materials of Construction:
PVC and Glass filled Polypropylene

Typical Applications

- Comfort Cooling Process
- Industrial Cooling
- Rinse
- Industrial Process
- Wastewater



MicroVision Cooling Tower Controller

The MicroVision is a microprocessor-based torodial conductivity controller with selectable timer and dual biocide control. Designed specifically for cooling tower applications, MicroVision comes standard with the features and functions you need for accurate monitoring and control of cooling tower water. The MicroVision is a full function controller in a compact package that won't break your budget!

Controller Specifications

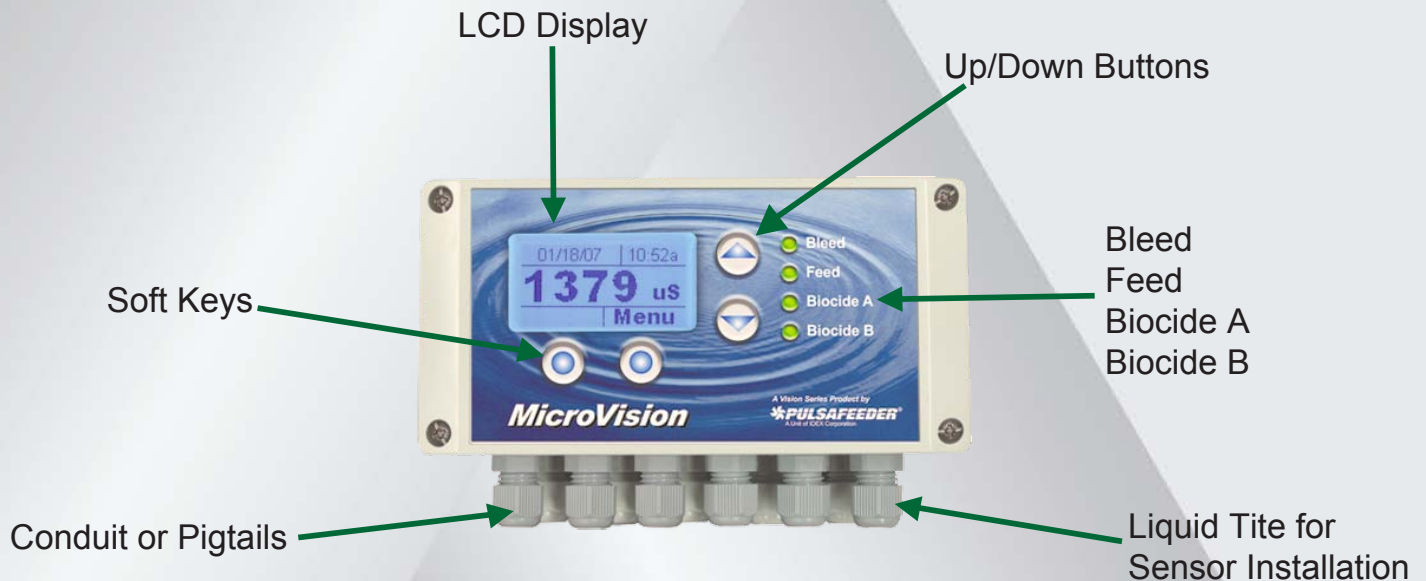
- Enclosure: NEMA 4X / IP65
- Dimensions: 6.44 x 3.2 in (163 x 82 mm)
- Power Supply:
90 VAC / 50/60Hz / 5A;
250 VAC / 50/60Hz / 5A
- Control Output:
5 Amps max
- Display: LCD
- Set Point Range: 0 – 9,999 μ S/cm
- Languages: English, Spanish, Portuguese

Flow Switch Specifications

- Max. Temp: 122°F (50°C)
- Max. Pressure: 125 PSI (8.6 BAR)
- Activate Flow Rate:
Approximately 1 GPM / 3.78 LPM
- Materials of Construction:
PVC and Glass filled Polypropylene

Typical Applications

- Comfort Cooling Process
- Industrial Cooling
- Rinse
- Industrial Process
- Wastewater



System Options



Flow Assembly

Optional

- 125 psi max
- Available with or without panel



Standard Panel and Flow Assembly

Optional

- Flow Assembly per mounted on poly panel
- Quick, simple installation



Panel Mounted with Pumps

Optional

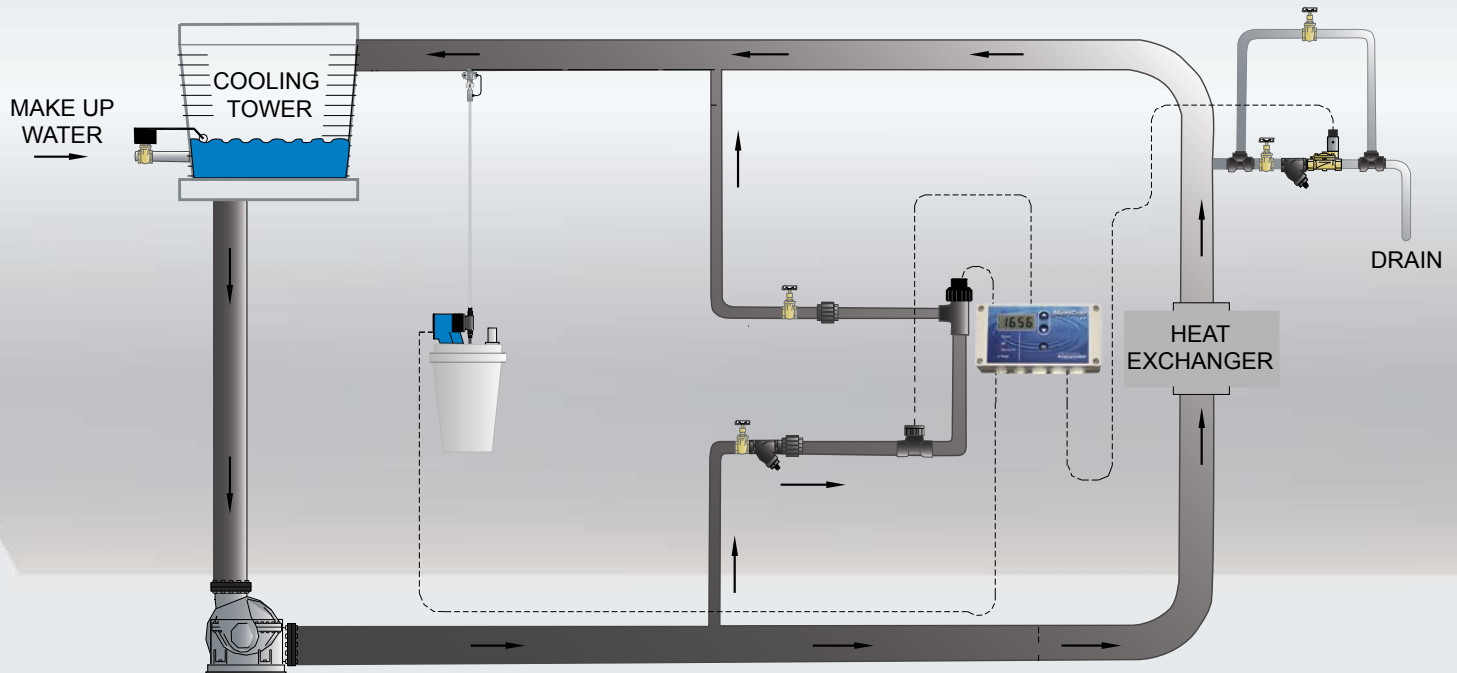
- **MicroTrac, Panel & Flow Assembly** includes 1 pump mount, in/out ball valves, strainer, inj. tee & rails
- **MicroVision, Panel & Flow Assembly** includes from 1 to 3 pump mount(s), strainer, sensor tee, inj. tee(s) & rails

MicroTrac Typical Installation

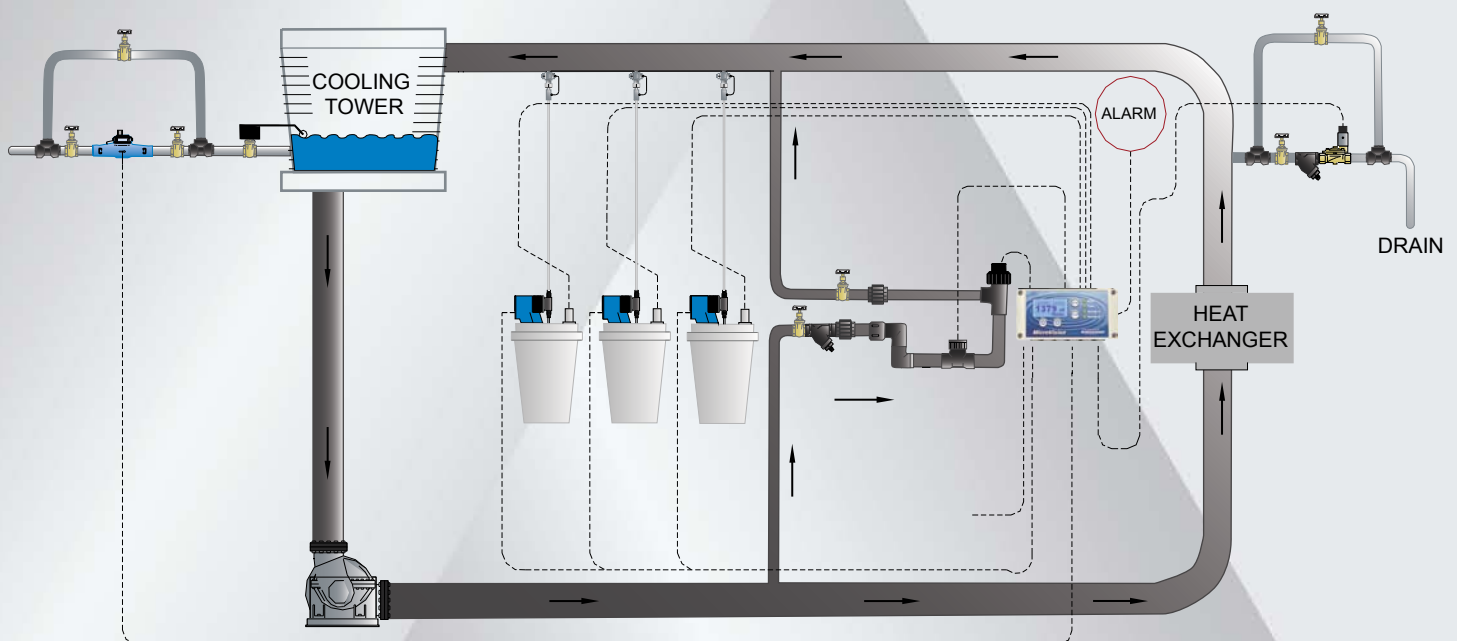
Typical Installation Includes:

- Solenoid Valve
- Water Meter
- Isolation Valves
- Metering Pumps

All Available from Pulsafeeder!



MicroVision Typical Installation



Parts & Accessories



PULSAtron Series Electronic Metering Pumps

The PULSAtron Series A Plus and E Plus electronic metering pumps can be used with the MicroVision and MicroTrac Series controller for timer based chemical metering.



CHEM-TECH Series Peristaltic Metering Pumps

The CHEM-TECH Series XP and XPV peristaltic metering pumps can be used with the MicroVision and MicroTrac Series controller for timer based chemical metering.



Coupon Racks

Designed to provide reliable, convenient side stream monitoring using ASTM standard coupons. These rugged systems can be configured for up to six monitoring stations.



Contacting Head Water Meters Multi-Jet Meters

3/4 in. to 2 in., are designed for use in conjunction with a pulse timer to proportionally control pumps, valves etc. The Multi-Jet chamber of the water meter assures accuracy over a wide range of flows with low head loss.



Solenoid Valves - Cooling Tower Applications

Solenoid Valves for use in your cooling tower application.

**Contact your local
Pulsafeeder Distributor or
Pulsafeeder Technical Services
at 800-333-6677**



PULSAFEEDER®

The MicroTrac is a microprocessor based feed and bleed toroidal conductivity controller designed to control conductivity and feed inhibitor in cooling tower systems. Featuring innovative toroidal sensor technology, the MicroTrac provides an economical control platform that is not susceptible to sensor fouling and never requires calibration! The MicroTrac toroidal conductivity sensor is factory calibrated for the life of the probe eliminating routine calibrations saves you valuable service time and money. By design, the MicroTrac toroidal conductivity sensor has no exposed electrodes, which means that there is nothing to wear out or foul. When installed according to the manufacturer's instructions, the need for routine sensor removal and cleaning is virtually eliminated.

The MicroTrac measures the conductivity of the cooling tower recirculating water via a toroidal conductivity sensor. The controller activates two independent relay outputs based on bleed and a selectable feed mode of operation. The MicroTrac conductivity controller has a 0 - 9,999 $\mu\text{S}/\text{cm}$ range, making it ideal for other applications as well, such as rinse, industrial process, wastewater, etc.



FEATURES

- Toroidal conductivity sensor factory calibrated and maintenance free.
- Selectable rising or falling setpoint for open or closed loop control.
- Water meter pulse timer.
- Percent timer.
- % post bleed timer.
- Limit timer.

CONTROLS



Timers

- Water meter pulse timer
- Percent timer
- % post bleed timer
- Limit timer
- Alarm output

OPERATING BENEFITS

- Easy to use.
- No calibration required.
- Reduced potential for fouling.
- Easy Installation.
- Two year warranty.
- Large range: 0 – 9,999 $\mu\text{S}/\text{cm}$.
- Simple user interface.



MicroTrac
Cooling Tower Controller

SPECIFICATION AND MODEL SELECTION

MODEL	Voltage	Relay & Power Wiring	Sensor Tee	Flow Switch
MTC1LTA-XXX	115V	Liquid-Tight	Yes	Standard Panel & Flow Assembly
MTC1LTA-CZXXX	230V	Liquid-Tight	Yes	Standard Panel & Flow Assembly
MTC1LTF-XXX	115V	Liquid-Tight	Yes	Flow Switch with 15' cable
MTC1LTF-CZXXX	230V	Liquid-Tight	Yes	Flow Switch with 15' cable
MTC1LTX-XXX	115V	Liquid-Tight	Yes	Standard (no flow switch)
MTC1LTX-CZXXX	230V	Liquid-Tight	Yes	Standard (no flow switch)
MTC1PTA-XXX	115V	Prewired w/ pigtails	Yes	Standard Panel & Flow Assembly
MTC1PTF-XXX	115V	Prewired w/ pigtails	Yes	Flow Switch with 15' cable
MTC1PTL-XXX	115V	Prewired w/ pigtails	Yes	No Panel & Flow Assembly
MTC1PTX-XXX	115V	Prewired w/ pigtails	Yes	Standard (no flow switch)
MTC1XTF-XXX	115V	Prewired & Liquid-Tight	Yes	Flow Switch with 15' cable
MTC1XTX-XXX	115V	Prewired & Liquid-Tight	Yes	Standard (no flow switch)

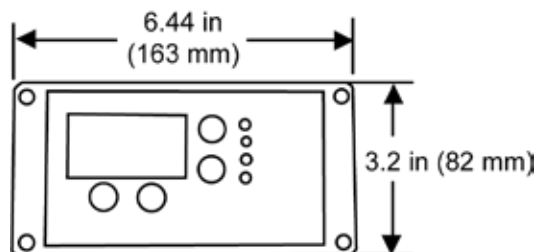
CE approved, non-prewired models, or 230 VAC, change the end of the code from "-XXX" to "-CZXXX"

ENGINEERING DATA

Controller Specifications	
Enclosure	IP65 / NEMA 4X
Temperature Range	122°F / 50°C
Power Supply	90 VAC – 240 VAC / 50/60Hz / 5A
Control Output	Line Voltage @ 240VA per Relay (2 Amps @ 120VAC))
Display	LCD
Set Point Range	0 - 9,999 μ S/cm
Set Point Differential (Hysteresis)	Fixed 5% below the set point

Sensor Specifications	
Maximum Temperature	122°F / 50°C
Flow Switch Activate Flow Rate	Approx. 1 GPM / 3.78 LPM
Conductivity Temp. Compensation Range	32°F - 122°F / 0°C - 50°C
Maximum Pressure	125 PSI (8.6 BAR)
Flow Switch Materials of Construction	PVC and Glass Filled Polypropylene
Sensor Type	Toroidal Conductivity
Cable Length, Standard	15' / 4.5m
Cable Length, Maximum	100' / 30.5m
Thread Size	0.5" Standard Thread-Excludes Tee and Reducer
Maximum Outside Diameter	1.5" / 38mm-Excludes Tee and Reducer
Materials of Construction	Virgin Polypropylene

DIMENSIONS



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An ISO Certified Company

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