CONTROLLER CAPABILITIES

SIMPLE, RELIABLE AND SECURE.

WORRY LESS AND DO MORE WITH

PULSAFEEDER CONTROLLERS

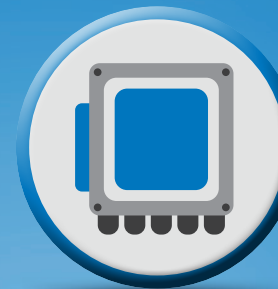## Pulsafeeder simplifies advanced controller technology.

Pulsafeeder makes life simpler for water treaters. Our advanced controller is easy to install, program and operate because of **proven** MicroVision **software** that utilizes an intuitive user interface. Accurate measurement is achieved by our **toroidal probe**, which is factory-calibrated and maintenance-free. **PULSAlink cloud-based communication protocol** delivers convenience and the highest security. The Pulsafeeder line of controllers are ideal for all cooling tower applications including comfort cooling, industrial cooling, rinse, industrial process and also wastewater applications.

Water treaters can select from multiple control configurations and probe inputs — with specific models utilizing all available probe options, including Conductivity (Toroidal), pH, ORP and PTSA.

Controller options include

Conductivity Control   *Conductivity and pH*   *Conductivity and ORP*   *Conductivity, pH and ORP*

Conductivity, pH, ORP and PTSA   *Boiler Control*   *Timer Control*

Pulsafeeder's line of controllers, along with the support of Pulsafeeder sales and technical representatives, ensure water treaters of **quick troubleshooting**, freeing up more time to serve their customers. **Maintain process control, reduce costs and limit downtime**.

ADVANCED FEATURES AND FUNCTIONS TO BETTER SERVE YOUR CUSTOMERS.

As a longtime recognized leader in fluids handling technology, Pulsafeeder sets the standard for the development of controller technologies through our proven MicroVision and MicroVision EX control platforms. Rely on our controllers for features that allow you to better serve your customers' specific needs — all while making your job easier.

MicroTrac

COOLING TOWER CONDUCTIVITY CONTROLLER.

- LCD display
- Maintenance free toroidal conductivity
- Bleed control
- One selectable timer
- Easy programming
- Outstanding value

MicroVision EX

COOLING TOWER CONDUCTIVITY, PH, PTSA & ORP CONTROLLER.

- Large LCD screen for programming simplicity
- Maintenance free toroidal conductivity
- Bleed, pH & ORP control
- PTSA on a 4-20mA input
- Up to Six programmable timers
- Two 4-20mA inputs
- Four 4-20mA outputs
- USB data logging and cloning
- Alarm dry contact
- High pressure models
- PULSAlink cloud communications
- Modbus

MicroVision Boiler

BOILER CONDUCTIVITY CONTROLLER.

- Graphical display
- Boiler conductivity control
- Three Timers
- Standard 4-20mA output
- Alarm dry contact
- Condensate models
- Easy programming

MicroVision

COOLING TOWER CONDUCTIVITY CONTROLLER.

- Graphical display
- Maintenance free toroidal conductivity
- Bleed control
- One inhibitor timer
- Dual biocide timers
- Three Timers
- Standard 4-20mA output
- Alarm dry contact
- Easy programming

MicroVision Timer

COOLING TOWER TIMER CONTROLLER.

- Graphical display
- Four powered timers
- One dry contact timer
- Easy programming
- Add timers to existing systems

MicroTrac

MicroVision

MicroVision Timer

MicroVision Boiler

MicroVision EX

		MicroTrac	MicroVision	MicroVision Boiler	MicroVision Timer	MicroVision EX
Control	Bleed	●	●	●	●	●
	pH					●
	ORP					●
	Boiler Control			●		
Probe	Maintenance Free Torroidal Conductivity	●	●			●
	PTSA (4-20 mA input)					●
Display	Graphical Display		●	●		●
	Color LCD					●
Programming	Customizable Display					●
	Install Wizard					●
	Statistics Screen		●	●	●	
Timers	Number of Timers	1	3	3	4	Up to 6
	Limit Timer	●				●
	Percent Timer	●	●	●	●	●
	% Post Bleed With Limit Timer	●	●	●		●
	Water Meter Pulse Timer		●	●	●	●
	Alarm Output					●
	Biocide Control Timer		●	●	●	●
	4-20 Input, Conductivity, pH, or ORP Set Point Control					●
Digital Inputs	Number of Digital Inputs	2	5	5	5	Up to 10
	Dry Contact		●	●	●	●
	Hall Effect		●	●	●	●
	Drum Level		●	●		●
	Flow	●	●	●	●	●
Relays	Number of Powered Relays	2	4	4	4	8
	Alarm Interlock		●	●		●
	Inhibitor feed Bio Tracking interlock		●		●	●
	Dry Contact Alarm		●	●	●	●
Communications	PULSAlink Cloud Communication					●
	Data Logging					●
	Reporting & Graphing					●
	USB Configuration Cloning					●
	Modbus					●
Options	Condensate			●		
	Corrosion Sensor					●
	High Pressure Models					●
	4-20 I/O Maximum		out	out		4 out /2 in

TOROIDAL PROBE MEANS MAINTENANCE FREE, RELIABILITY AND SAVINGS.

TOROIDAL CONDUCTIVITY PROBE BRINGS SUPERIOR RELIABILITY AND SAVINGS.

- Factory-calibrated and maintenance-free for the life of the probe
- Not susceptible to sensor fouling, which eliminates cleaning downtime and erroneous conductivity readings
- No annual replacement needed
- No exposed electrodes
- No need to complete routine calibrations, which saves time and money and reduces downtime for your customers

INNOVATIVE TOROIDAL SENSOR TECHNOLOGY.

MicroVision family of controllers features the toroidal conductivity sensor, factory-calibrated for the life of the probe to eliminate routine calibrations and save you valuable service time and money. Because the sensor features no exposed electrodes, cleaning, downtime and erroneous conductivity readings are eliminated when installed according to the manufacturer's instructions.

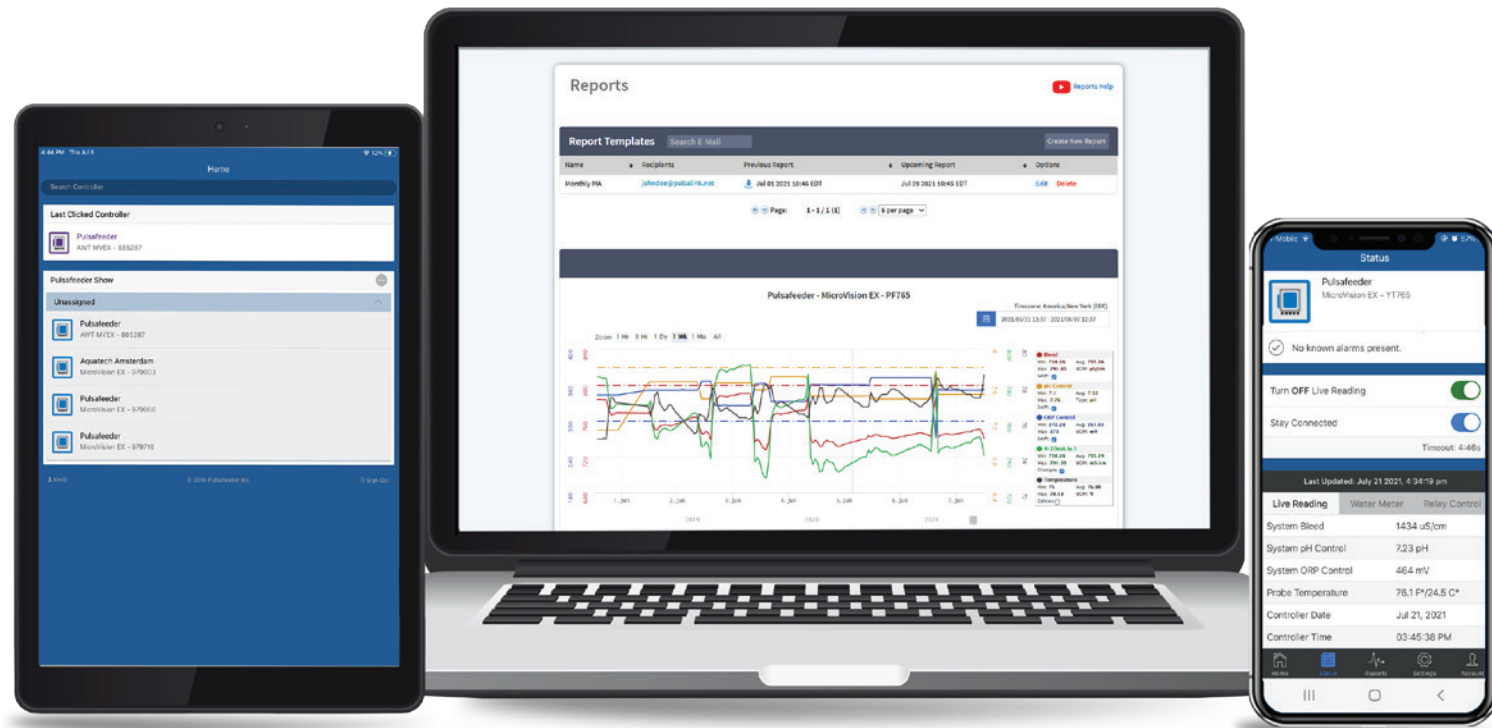## PULSALINK COMMUNICATIONS SAVES TIME AND OFFERS PEACE OF MIND.

- Cloud storage
- Military-grade encryption AES 256
- Easy navigation
- Fast data retrieval
- Multi-level user access

PULSALINK PUTS YOU IN CONTROL ANYTIME, ANYWHERE.

Exclusive PULSAlink communication delivers cloud-based, secure mobile access to your MicroVision EX controllers. Data is stored safely on the cloud, and AES 256-bit military-grade encryption provides unsurpassed security. Get easy-to-use, interactive reporting and graphing tools — plus quick access to settings and notifications — right from your mobile device. This level of connectivity enables you to monitor and make adjustments anytime, from anywhere.

The PULSAlink app gives water treaters easier access through streamlined navigation, putting vital information at your fingertips anytime, anywhere.

PULSALINK COMMUNICATIONS IS CONVENIENT AND SECURE.

Save time and money by accessing your MicroVision EX controllers without having to make the drive to site locations.

MicroVision EX delivers the cloud-based communications capabilities of PULSAlink, leveraging military-grade

AES 256-bit encryption to ensure the highest data security. Now it's easy to provide your customers with the peace of

mind they deserve, while you monitor and make needed adjustments anytime, from anywhere.

EASY ACCESS ON THE GO.

PULSAlink communications enables you to use your mobile phone, tablet or computer to access your controller anytime from anywhere — putting vital information at your fingertips. The PULSAlink app gives water treaters easier access than the desktop version by offering more streamlined navigation.

LIVE READINGS
View and monitor cooling tower readings anytime, anywhere using any device with an internet connection.

CHANGE SETTINGS
MicroVision EX Touch allows you to quickly change system settings remotely.

EMAIL NOTIFICATIONS
Configure alerts for alarm notifications and live readings to be emailed to any necessary staff.

REPORTS
Download and create reports without having to be in front of your controller.

CUSTOMIZATION AT YOUR FINGERTIPS.

Customizable names for relays, water meters and inputs, synced to Controller, PULSAlink website, App iOS/Android, and reports. You deserve reporting capability that lets you do your job quickly and accurately, so you can get more done. And now you have it. PULSAlink doesn't require you to refresh the report to change test parameters. At any time, you can simply drag all parameters onto one screen. With PULSAlink, reporting has never been easier:

- Report page automatically pulls up past week's data
- Toggle from default report page to specific time periods and test output parameters
- Compatible with eService Report
- Unsurpassed reporting and graphing
- No need to enter individual dates and variables to develop graphs
- Enhanced charting capabilities
- Robust data logging capabilities

YOUR SECURITY IS A LOCK.

PULSAlink offers centralized data storage and management for superior control of your equipment. Should your controller ever be offline, your data is safe and accessible. Anyone attempting to access the PULSAlink website will need a login password, which is only generated by Pulsafeeder or your administrator.
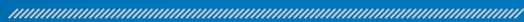
MicroVision EX and PULSAlink are supported by the highest encryption level in the industry:
- Prevents unauthorized manipulation of controller
- Prevents unauthorized data access
- Connects directly to the Internet without the need of an additional modem
- Doesn't require the use of ports that may be affected by a firewall

Communications with data logging and reporting has become very important in the fight against Legionella. Timely response is vital. MicroVision EX controllers with PULSAlink lets you quickly access your controllers without having to waste time driving to site locations.

COOLING TOWER CONTROLLERS — MicroVision EX

Conductivity Control

Model Number	Probe Style	Flow Switch	Programmable Timers	Panel / Pump Mount	Digital Inputs	PULSAlink and Smart Phone App Compatiable
No Panel						
MVECXXXPX-XXX-XXX	Torodial	None	3	None	6	No
MVECXXXPX-XXX-CZXXX	Torodial	None	3	None	6	No
MVECXXXPF-XXX-XXX	Torodial		3	None	6	No
MVECXXXPF-XXX-CZXXX	Torodial		3	None	6	No
MVEC8XXPX-XXX-XXX	Torodial, Field upgradable to pH & ORP models	None	3	None	10	Yes
MVEC8XXPF-XXX-XXX	Torodial, Field upgradable to pH & ORP models		3	None	10	Yes
Panel / No Pump Mounts						
MVECXXXPA-XXX-XXX	Torodial		3	Yes / No	6	No
MVECXXXPA-XXX-CZXXX	Torodial		3	Yes / No	6	No
MVEC5XXPA-XXX-XXX	Torodial		4	Yes / No	6	No
MVEC5XXPA-XXX-CZXXX	Torodial		4	Yes / No	6	No
MVECXXXPA-EXX-XXX	Torodial		3	Yes / No	6	Included
MVECXXXPA-EXX-CZXXX	Torodial		3	Yes / No	6	Included
MVECXXXPA-EPX-XXX	Toroidal, PYXIS (PTSA)		2	Yes / No	6	Included
MVECXXXPA-MXX-XXX	Torodial		3	Yes / No	6	Included/Modbus Compatibility
Panel / 3 Pump Mounts						
MVECXXXPD-XXX-XXX	Torodial		3	Yes / Yes - 3	6	No
MVECXXXPD-EXX-XXX	Torodial		3	Yes / Yes - 3	6	Included
MVECXXXPD-EQX-XXX	Torodial, PYXIS ready		3	Yes / Yes - 3	6	Included

Conductivity and pH

Model Number	Probe Style	Flow Switch	Programmable Timers	Panel / Pump Mount	Digital Inputs	PULSAlink and Smart Phone App Compatiable
No Panel						
MVECPXXPF-XXX-XXX	Torodial, pH		6	None	10	Order: ACT-PULSALINK
MVECPXXPF-XXX-CZXXX	Torodial, pH		6	None	10	Order: ACT-PULSALINK
Panel / No Pump Mounts						
MVECPXXPA-XXX-XXX	Torodial, pH		6	Yes / No	10	Order: ACT-PULSALINK
MVECPXXPA-XXX-CZXXX	Torodial, pH		6	Yes / No	10	Order: ACT-PULSALINK
MVECPXXPA-EXX-XXX	Torodial, pH		6	Yes / No	10	Included
Panel / 3 Pump Mounts						
MVECPXXPD-EXX-XXX	Torodial, pH		6	Yes / Yes - 3	10	Included

Conductivity and ORP

Model Number	Probe Style	Flow Switch	Programmable Timers	Panel / Pump Mount	Digital Inputs	PULSAlink and Smart Phone App Compatiable
No Panel						
MVECOXXPF-XXX-XXX	Torodial, ORP		6	None	10	Order: ACT-PULSALINK
Panel / No Pump Mounts						
MVECOXXPA-EXX-XXX	Torodial, ORP		6	Yes / No	10	Included
MVECOXXPA-EPX-XXX	Toroidal, ORP, PYXIS (PTSA)		5	Yes / No	10	Included
Panel / 3 Pump Mounts						
MVECOXXPD-EPX-XXX	Toroidal, ORP, PYXIS (PTSA)		5	Yes / Yes - 3	10	Included

Conductivity, pH and ORP

Model Number	Probe Style	Flow Switch	Programmable Timers	Panel / Pump Mount	Digital Inputs	PULSAlink and Smart Phone App Compatiable
No Panel						
MVECPOXPF-XXX-XXX	Torodial, pH, ORP		5	None	10	Order: ACT-PULSALINK
MVECPOXPF-XXX-CZXXX	Torodial, pH, ORP		5	None	10	Order: ACT-PULSALINK
Panel / No Pump Mounts						
MVECPOXPA-XXX-CZXXX	Torodial, pH, ORP		5	Yes / No	10	Order: ACT-PULSALINK
MVECPOXPA-EXX-XXX	Torodial, pH, ORP		5	Yes / No	10	Included
MVECPOXPA-EPX-XXX	Toroidal, pH, ORP, PYXIS (PTSA)		4	Yes / No	10	Included
MVECPOXPHP-EXX-XXX	High Pressure Conductivity, pH, ORP		5	Yes / No	10	Included
MVECPOXPA-VXX-XXX	Torodial, pH, ORP		5	Yes / No	10	Included & Modem Millie
Panel / 3 Pump Mounts						
MVECPOXPD-EXX-XXX	Torodial, pH, ORP		5	Yes / Yes - 3	10	Included

COOLING TOWER CONTROLLERS — MicroVision

Model Number	Voltage	Power Wiring	Panels
MVS1PA-XXX	115V	Prewired w/ pigtails	Standard Panel & Flow Assembly
MVS1PA-CZXXX	230V	Conduit	Standard Panel & Flow Assembly
MVS1PD-XXX	115V	Prewired w/ pigtails	Panel & Flow Assy, 3 Pump Mount, strainer, sensor tee, 3 inj tees & rails
MVS1PD-CZXXX	230V	Conduit	Panel & Flow Assy, 3 Pump Mount, strainer, sensor tee, 3 inj tees & rails
MVS1PF-XXX	115V	Prewired w/ pigtails	Flow assembly, No Panel
MVS1PF-CZXXX	230V	Conduit	Flow assembly, No Panel
MVS1PX-XXX	115V	Prewired w/ pigtails	No Panel and No Flow assembly
MVS1XX-XXX	115V	Conduit	No Panel and No Flow assembly
MVS1XX-CZXXX	230V	Conduit	No Panel and No Flow assembly

COOLING TOWER CONTROLLERS — MicroTrac

Model Number	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	Standard Flow Assembly (no panel)
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)

BOILER ONTROLLERS — MicroVision Boiler

Model Number	Power Wiring	System Options	Sensor	Cable Length
MVBXCHAS010-XXX	Conduit connections	100 psi max.-Timed Sample-Solenoid vlv, orfice union w/ plates	Contact Electrode	10 feet
MVBXCHXS010-XXX	Conduit connections	None	Contact Electrode	10 feet
MVBXCHXS010-CZXXX	Conduit connections; 230V	None	Contact Electrode	10 feet
MVBXCHXH010-XXX	Conduit connections	None	4420F / 375 psi - H.T. & Press.	10 feet
MVBXCHXR010-XXX	Conduit connections	None	3/4" Short style sensor & tee	10 feet
MVBXCHXS025-XXX	Conduit connections	None	Contact Electrode	25 feet
MVBXCHXS025-CZXXX	Conduit connections; 230V	None	Contact Electrode	25 feet
MVBXCHXS050-XXX	Conduit connections	None	Contact Electrode	50 feet
MVBXCHXS075-XXX	Conduit connections	None	Contact Electrode	75 feet
MVBXCHXS075-CZXXX	Conduit connections; 230V	None	Contact Electrode	75 feet
MVBXPHBS025-XXX	Prewired with pigtails	250 psi max-Timed Sample-Motorized vlv, flow throttling vlv	Contact Electrode	25 feet
MVBXPHXH010-XXX	Prewired with pigtails	None	4420F / 375 psi - H.T. & Press.	10 feet
MVBXPHXR010-XXX	Prewired with pigtails	None	3/4" Short style sensor & tee	10 feet
MVBXPHXS010-XXX	Prewired with pigtails	None	Contact Electrode	10 feet
MVBXPHXS025-XXX	Prewired with pigtails	None	Contact Electrode	25 feet
MVBXPHXS050-XXX	Prewired with pigtails	None	Contact Electrode	50 feet
MVBXPHXS150-XXX	Prewired with pigtails	None	Contact Electrode	150 feet

CONDENSATE CONTROLLERS — MicroVision Condensate

Model Number	Power Wiring	System Options	Sensor	Cable Length
MVBXCHXC025-XXX	Conduit connections	None	Condensate - 0 to 20 µS/cm	25 feet
MVBXCHXC025-CZXXX	Conduit connections; 230V	None	Condensate - 0 to 20 µS/cm	25 feet
MVBXPHXC025-XXX	Prewired with pigtails	None	Condensate - 0 to 20 µS/cm	25 feet

PROGRAMMABLE TIMERS — MicroVision Timer

Model Number	Power Wiring	Panels
MVT1PA-XXX	Prewired power cord and pigtails	Standard Panel and Flow Assembly
MVT1PF-XXX	Prewired power cord and pigtails	Flow Assembly, No Panel
MVT1PX-XXX	Prewired power cord and pigtails	No Panel and No Flow Assembly

PULSAFEEDER®

IDEX

AN ISO 9001 CERTIFIED COMPANY

CTFB001 B22