

DCS 900

The DCS 900 was designed specifically to control conductivity and feed inhibitor in cooling tower systems. With three timer modes and optional water meter input, the DCS 900 offers the best value in a stand-alone control system. Each system comes standard with a flow switch, 4-electrode Stainless Steel Sensor, bleed relay and control relay for controlling a chemical feed pump.

Key Features:

- Conductivity Range 0-6000 μ S
- Easy to Program
- Single Button Function Keys
- Bleed Relay Output
- Control Relay Output
- Easy to Connect Accessories via DIN Connectors
- Optional Dry Contact or Hall Effect Water Meter Input
- Optional Panel Mounted Flow Assembly with Sensor Tee



DCS902XAX Feed & Bleed Conductivity Control



DIN Connectors for Sensors and I/O

DCS 900 SERIES SELECTION GUIDE	
Standard Model includes SS Sensor, 3/4" flow switch and tee. Timers include Limit, %T, and % Post. Water Meter version also includes a Pulse Timer.	
MODEL	1 = No Water Meter Input, %T, % Post and Limit Timer 2 = Water Meter Input, Pulse Timer, %T, % Post and Limit Timer
ELECTRICAL	X = 115 VAC 50/60 Hz, Prewire, ETL Approval A = 115 VAC 50/60 Hz, Conduit, ETL Approval B = 230 VAC 50/60 Hz, Prewire, ETL & CE Approvals C = 230 VAC 50/60 Hz, Conduit, ETL & CE Approvals
FLOW	X = Flow switch and tee with 8.5' Cable (Standard) A = Mounted Flow Assembly. Controller & sensor tee and flow switch conveniently mounted onto a polypropylene back board. (see note.)
SENSOR	X = Stainless Steel Sensor, 8.5' cable (Standard) A = Carbon graphite Sensor, 8.5' cable

Note: Sensor and flow switch cable lengths cut appropriately for this configuration.



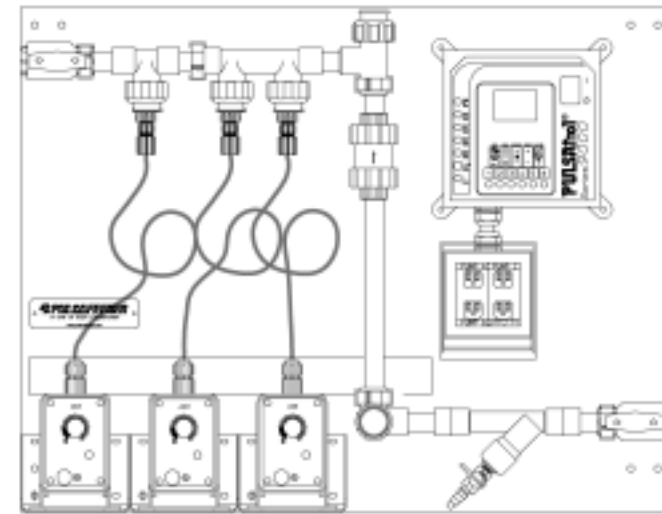
PULSAtron Plus

The PULSAtron Plus is a unique family of products that combine basic control functions into a PULSAtron pump, eliminating the need for separate pieces of equipment. Available across a full range of pump capacity and

pressure ratings, the PULSAtron Plus family incorporates a variety of control features that target specific applications. For details see bulletin no. EMP-015 or consult your Pulsafeeder representative.

Panel Systems

For a complete turn-key system, Pulsafeeder offers a family of control panels that include the controller, pump and chemical injection points in the flow assembly. You can easily select one of our pre-defined layouts or design your own system. For details see bulletin no. CTI-006 or consult your Pulsafeeder representative.



Conduit version of the Conductivity Panel includes three injection points and pump shelf brackets for creating a dual-biocide control system. Pump relays are conveniently wired into a water-tight outlet box with a splashguard cover.

PULSAFEEDER[®]

A Unit of IDEX Corporation

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technology
innovation diversity
excellence

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.

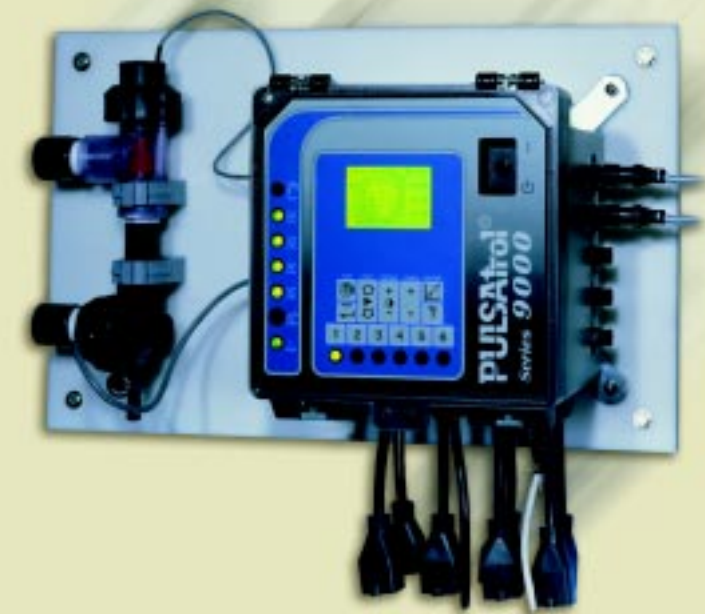
Innovation is another hallmark of Pulsafeeder. Helping customers find a new approach to an old problem is what we do best. Our trained technical staff is not only available to help with your application questions; they provide a vital link between our design staff and the customers we serve.

The **diversity** of our product line ensures that you will find a solution that addresses the specifics of your application. We are proud to offer a full range of pumps and controllers that address a wide variety of customer requirements — from the simplest to the most complex. We understand that the “standard” pump is not always adequate for every application and offer a full range of materials and options that allow customers to custom-order pumps that fit their specific application needs.

Pulsafeeder's commitment to **excellence** extends far beyond our products. It is the *people* of Pulsafeeder that truly set our company apart from the competition. Every employee at Pulsafeeder is trained for the position they fill and is dedicated to ensuring that our customer is satisfied both before and after the sale.

Moving
Forward
...with metering and control systems
for a better tomorrow.

Cooling Tower Control Systems



PULSAFEEDER[®]
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PULSAtrol Series 9000



DIN Connectors for Sensors and I/O

Standard Features available in all models:

- NEMA 4X (IP65) High Impact Resistant PVC Enclosure
- DIN Connections for I/O
- Receptacle Cords for Relay Connections
- Stainless Steel Conductivity Sensor (conductivity models)
- A Full 24 Months Warranty

When we ask customers what they are looking for when they choose a controller, the answers are not surprising – “Give me a simple solution that works. A simple solution needs to be flexible enough to adapt to specific applications, yet easy to configure and operate.” Keeping that in mind, Pulsafeeder brings a new level of simplicity, as well as affordability, to Cooling Tower Controls. Our product family ranges from the simple ‘feed and bleed’ control of small towers to sophisticated multi-parameter requirements of larger systems. We have taken great care to create the right mix of standard features and options so that you can quickly and easily select the model that is right for you.

PULSAtrol 9000 Series

The PULSAtrol 9000 Series introduces a new level of simplicity to the PULSAtrol product line. We have simplified the configurations to bring you the most popular features, as standard without compromising the flexibility to select the product you need to meet your specific requirements.

9200 Series

Standard Features

- Conductivity 0 – 20,000 $\mu\text{S}/\text{cm}$
- pH Control with Hi-Lo Alarm Indicator
- Mounted Flow Assembly
- Dry Contact Water Meter Input
- Dry Contact Alarm & Alarm Relay
- Selectable Timer

- 2 x 16 Alphanumeric Display
- Lockable Viewing Window

Optional Features

- Single or Dual Biocide Timers
- Single or Dual 4-20mA Outputs
- Modem Communications

9300 Series

Standard Features:

- Conductivity 0 – 20,000 $\mu\text{S}/\text{cm}$
- pH Control with Hi-Lo Alarm Indicator
- ORP Control with Hi-Lo Alarm Indicator
- Mounted Flow Assembly
- Up to 4 Taggable Timers
- 2 Water Meter Totalizers
- Dry Contact or Hall Effect Water Meter Input

- Dry Contact Alarm & Alarm Relay
- Multi-line Graphics Display
- Lockable Viewing Window
- Multi-level Password Control

Optional Features:

- Single or Dual Set Point for pH
- Dual 4-20mA Outputs
- Modem Communications
- English, German, French or Spanish Menus

9500 Series

Standard Features:

- Conductivity 0 – 20,000 $\mu\text{S}/\text{cm}$
- pH Control with Hi-Lo Alarm Indicator
- ORP Control with Hi-Lo Alarm Indicator
- Mounted Flow Assembly
- 4 Drum Level Monitors with Alarms
- Up to 4 Taggable Timers
- 2 Water Meter Totalizers
- Dry Contact or Hall Effect Water Meter Input
- Dry Contact Alarm & Alarm Relay

- Multi-line Graphics Display
- Lockable Viewing Window
- Multi-level Password Control

Optional Features:

- Single or Dual Set Point for pH
- Up to four 4-20mA Outputs
- Up to four 4-20mA Inputs
- Modem Communications
- English, German, French or Spanish Menus

Entire system mounted on a durable polypropylene panel for easy installation.

Mounted Flow Assembly – all sensors conveniently located for easy access.

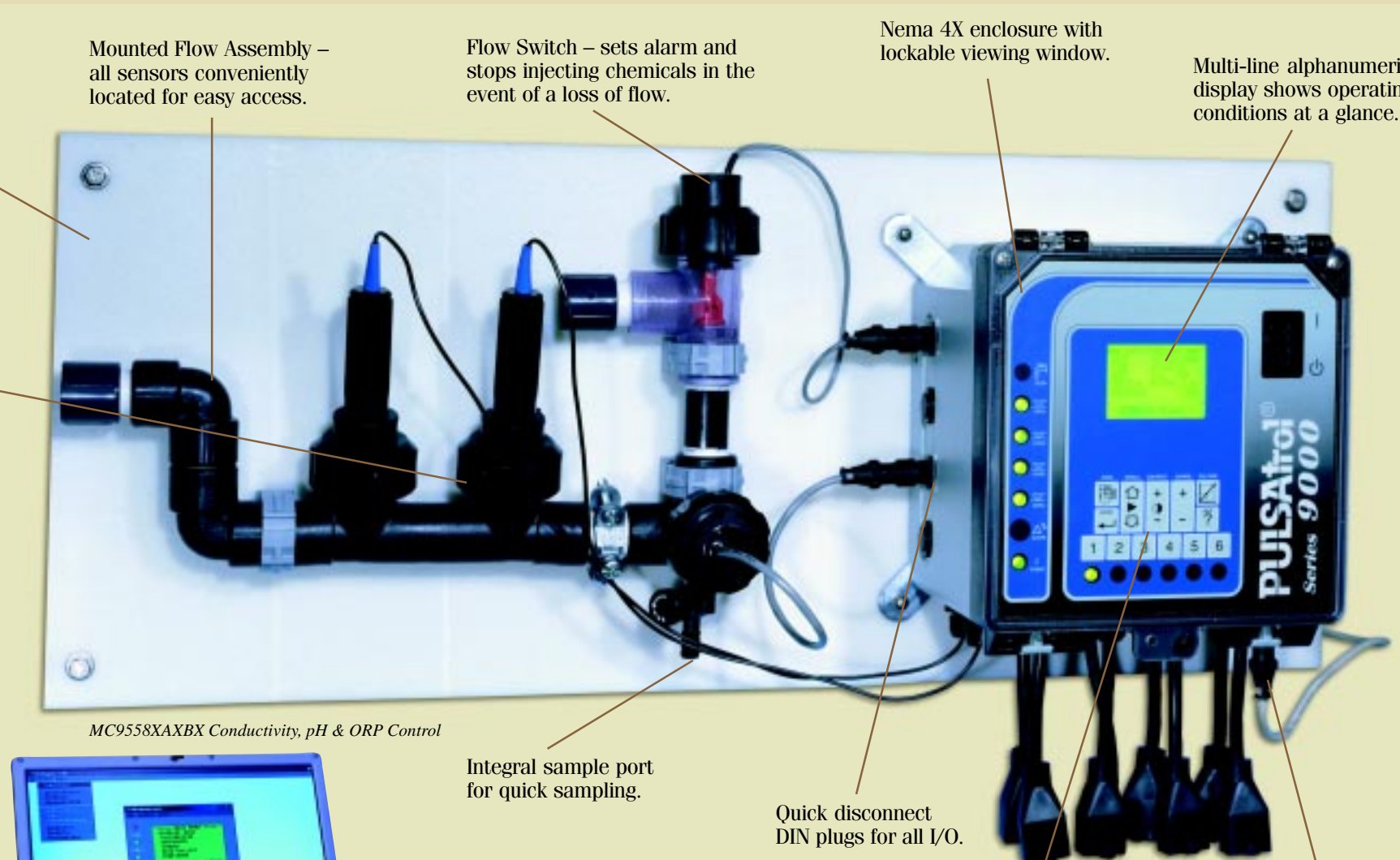
Flow Switch – sets alarm and stops injecting chemicals in the event of a loss of flow.

Nema 4X enclosure with lockable viewing window.

Multi-line alphanumeric display shows operating conditions at a glance.

Quick disconnect sensors for easy maintenance and calibration.

Each model comes standard with Sensors, a flow switch and a flow assembly mounted onto a sturdy polypropylene back plate. All your installer needs to do is mount the assembly on the wall and connect the power and water. DIN style connectors for sensors, water meters and other low voltage I/O will allow you to quickly configure the controller with the options your application requires without having to be an electronic technician.



MC9558XAXBX Conductivity, pH & ORP Control

PULSAworks

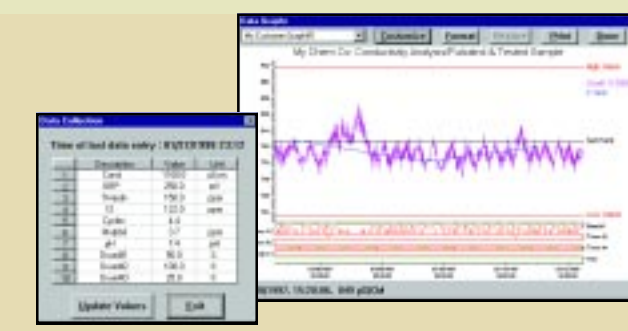
Communicate with PULSAtrol 9000 Series via modem to minimize service time. Any number of controllers can be monitored, and adjusted right from your desktop.

The data collection and charting capability of PULSAworks will give you the ability to share important statistics with your customers about their system operation and chemical usage.

PULSAworks is simple to use. When you connect to the controller through the dialer, the screen on your computer will look and operate exactly like the user interface on the controller. The interface is as if you are standing in front of the controller. Change settings, download history and receive notification of alarm conditions – without leaving your office.

Standard Features:

- Built-in SPC features
- Microsoft® Excel macro for data export
- Multi-level password control
- Store information, phone numbers, and passwords for up to 35 controllers
- Auto-poll feature to automatically initiate contact with a controller on a scheduled basis to download data
- Automatically receive alarm callbacks



Model Selection Guides for each model make it easy to configure the appropriate model number when ordering.

MC9200 SERIES SELECTION GUIDE		MC92	_	_	_	_
MODEL	10 = MC9210 Conductivity Controller 20 = MC9220 pH Controller 30 = MC9230 Combination pH & Conductivity					
WIRING	X = Prewire (Standard) (Not available with CE Approval) A = Conduit					
TIMER 1	X = None A = Single 28 day Biocide Time B = Dual 28 day Biocide Timer					
ANALOG I/O	X = None A = Single isolated 4-20mA output B = Dual 4-20mA outputs					
COMMUNICATIONS	X = None A = Serial line communications, includes software B = Communications with modem & software					
AGENCY	X = None A = ETL APPROVAL B = "CE" APPROVAL					

MC9300 SERIES SELECTION GUIDE		MC93	_	_	_	_
MODEL	1 = MC9310 X X (COND.) 2 = MC9320 X X (COND/ORP) 3 = MC9330 X X (COND/PH)					
4-20 mA INPUTS & OUTPUTS	0 = NO 4-20 mA INPUTS, NO 4-20 mA OUTPUTS, 1 = NO 4-20 mA INPUTS, TWO 4-20mA OUTPUTS,					
RELAY & POWER WIRING	X = Prewire (Standard) (Not available with CE Approval) A = Conduit only (required for CE Approval)					
pH SETTINGS	X = Not applicable (for non pH systems) A = Single set point (uses 1 relay selectable for high pH or low pH) B = Dual set point (uses 2 relays one for high pH & one for low pH)					
LANGUAGE	X = English (Standard) B = German A = Spanish C = French					
COMMUNICATIONS	X = None A = Serial line communications, includes software B = Communications with modem & software					
AGENCY	X = None A = ETL APPROVAL B = "CE" APPROVAL					

MC9500 SERIES SELECTION GUIDE		MC95	_	_	_	_
MODEL	1 = MC9510 X X (COND.) 2 = MC9520 X X (COND/ORP) 3 = MC9530 X X (COND/PH) 4 = MC9540 X X (COND/MAKE-UP/PH) 5 = MC9550 X X (COND/MAKE-UP/PH/ORP) 6 = MC9560 X X (DUAL COND) 7 = MC9570 X X (DUAL COND)					
4-20 mA INPUTS & OUTPUTS	0 = NO 4-20 mA INPUTS, NO 4-20 mA OUTPUTS, 1 = NO 4-20 mA INPUTS, TWO 4-20mA OUTPUTS, 2 = NO 4-20mA INPUTS, FOUR 4-20mA OUTPUTS, 3 = TWO 4-20mA INPUTS, NO 4-20mA OUTPUTS, 4 = TWO 4-20mA INPUTS, TWO 4-20mA OUTPUTS, 5 = TWO 4-20mA INPUTS, FOUR 4-20mA OUTPUTS, 6 = FOUR 4-20mA INPUTS, NO 4-20mA OUTPUTS, 7 = FOUR 4-20mA INPUTS, TWO 4-20mA OUTPUTS, 8 = FOUR 4-20mA INPUTS, FOUR 4-20mA OUTPUTS,					
RELAY & POWER WIRING	X = Prewire (Standard) (Not available with CE Approval) A = Conduit only (required for CE Approval)					
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MC9210XBBXX Conductivity Control



MC9310XBBXX Conductivity Control



MC9558XAXBX Conductivity, pH & ORP Control