

DCM 5 Series Controller

Upgraded

An Ultimate Water Chemistry Solution for Aquatics Applications

ProMinent®



The **ProMinent® DCM 5 Series** controller is the perfect partner for monitoring and controlling water chemistry parameters and processes. The DCM 5 Series precision, flexibility and uncompromising quality represent a world-class solution to ensure a safe and healthy water experience.

Features & Benefits

- Proprietary sensor technology
- Oxidant specific sensor
- Combined chlorine control¹
- Simultaneous chlorine/ORP control
- Built-in WiFi router **NEW!**
- VFD control² **NEW!**
- Loading compensation via true proportional control
- Hydraulically advanced flowcell assembly
- Automatic discrete control and flow adjustments of chemical dosing pump³
- Capable of interface and control of UV systems via ProMinent's proprietary chlorine probes and real time combined chlorine readings
- Ability for tiered alarm notification via text/email, graphing data, and daily summary emails all standard **NEW!**
- Intuitive and easy to use remote interface with device recognition for easy operation on tablets, smart phones, and computers **NEW!**

Notes:

- 1 - Requires optional total chlorine probe
- 2 - Optional (requires additional internal adapter card)
- 3 - When used with ProMinent dosing pumps

Applications

- Swimming pools, Therapy pools & Hot tubs
- Water parks & Splash pads
- Amusement Park Attractions, Zoos & Aquariums

Ordering Information

- **DCM 500** - Controller package for pH, ORP and Temp (**P/N: 1080771**)
- **DCM 501** - Controller package for pH, ORP and PPM on non-stabilized (CYA) water (**P/N: 1080772**)
- **DCM 502** - Controller package for pH, ORP, Free, Total and Combined Chlorine on non-stabilized (CYA) water (**P/N: 1080773**)
- **DCM 503** - Controller package for pH, ORP and PPM with CYA stabilized water (**P/N: 1080774**)



Certified to
NSF/ANSI Standard 50



DCM 5 Series Controller

Specifications

Operator Interface					
Remote	Fully interactive ethernet and WiFi TCP/IP graphical interface with security access codes				
Local	4 line - 20 character OLED display, 12 buttons, multicolor status LED: Steady BLUE = "OK", Flashing RED = "ALARM", Steady RED = (Stopped), Multicolor output LEDs indicate relay output status as feeding/ off/ alarmed/ or stopped. Ethernet and WiFi status LEDs				
Sensors					
Included Sensors	pH, ORP, Temperature				
Optional Sensors	Free chlorine, total chlorine, calculated combined chlorine, salt generated free chlorine, stabilized chlorine, conductivity, bromine, feed verification, corrosion, flow rate, water level, UV Intensity, calculated LSI/Ryznar water totalizer				
Field Upgrades	Sensors and input modules are available for field upgrades				
Inputs					
Digital Inputs	8, (7 fully configurable) Examples: Sample Flow Switch, Return Line Flow Switch, Digital pulse flow meter(s), auto-fill float switch, external interlocks				
Analog Inputs	Up to 10 standard (configurable options) + 4 virtual (LSI, Combined Chlorine, GPM, etc.) Example: 1 Cond, Sample Temp, pH, ORP, Free Cl, Total Cl, Comb. Cl, UV intensity [4-20mA], room temperature, 2 additional gpm [4-20mA] inputs				
Outputs					
Control Relays	9 total: 2 AC line voltage, 3 Dry contact (AC or DC), 4 DC 24V (all fully assignable) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <ol style="list-style-type: none"> 1. Acid Feed 2. Oxidant Feed 3. Chlorine boost / caustic feed 4. CO2 feed 5. Auto Fill / alarm </td> <td style="width: 50%; vertical-align: top;"> <ol style="list-style-type: none"> 6. UV Pause 7. Temperature control or Fireman 8. UV Chloramine control 9. DCS/BMS OK or Alarm </td> </tr> <tr> <td colspan="2" style="text-align: center;">Interlocked with sample and recirc flow when used for chemical feed</td> </tr> </table>	<ol style="list-style-type: none"> 1. Acid Feed 2. Oxidant Feed 3. Chlorine boost / caustic feed 4. CO2 feed 5. Auto Fill / alarm 	<ol style="list-style-type: none"> 6. UV Pause 7. Temperature control or Fireman 8. UV Chloramine control 9. DCS/BMS OK or Alarm 	Interlocked with sample and recirc flow when used for chemical feed	
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Interlocked with sample and recirc flow when used for chemical feed					
Digital Outputs	4 (Fully assignable as dry contact sets or variable frequency pump) <ol style="list-style-type: none"> 1. UV, salt Cl2 generator or Heater control 2. PID Acid Pump / VFD control 3. Chlorine PID Control/ UV Pause 4. DCS BMS OK or Alarm / Eco! mode mode for recirc pump <p style="text-align: center;">Base feed available if sensor disconnected</p>				
Analog Outputs	Optional 2 isolated, 4-20mA				
Control					
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Communication					
	HTML server on board (standard) 10Base T, TCP/IP ethernet, optional wireless 3G cellular HTML, micro web server with DHCP or user definable IP address Standard built-in WiFi router (smartphone/ iPad/ Tablet) USB port for Datalog extraction, configuration saving, configuration uploading, & field software updates				
Security					
	Local and remote access protected by access codes (Up to 29 unique users and passwords with 3 access levels)				
SYSTEM					
Power	90-253VAC, 50/60Hz, 7.9Amp, single phase				
Fusing	Outputs fused @ 6.3 Amps total @ 120/250 VAC, Internal circuits fused at 1.6Amps				
Surge Suppression	Integral Surge Suppression - Relays 1-5				
Accessory Power	15VDC Thermally fused @ 60 mA, NAMUR inputs U-V thermally fused at 20mA				
Enclosure	Non-metallic, NEMA 4X				
Panel Dims.	18" x 30" x 6.5" (WxHxD)				
Convenience	Field Software upgrades via USB flash drive, Configuration cloning via Flash drive				
Warranty					
	5 years on electronics 2 years on ORP, pH sensors 1 year on all other parts				

