DCM 5 Series Controller

Upgraded

An Ultimate Water Chemistry Solution for Aquatics Applications

*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 control[1]
- Simultaneous chlorine/ORP control
- Built-in WiFi router NEW!
- VFD control[2] NEW!
- Loading compensation via true proportional control
- Hydraulically advanced flowcell assembly
- Automatic discrete control and flow adjustments of chemical dosing pump[3]
- 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!
- BMS communication abilities with Modbus RTU & TCP as well as BACnet IP & MSTP[2]

Applications

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

Ordering Information

- **DCM 510** - Controller package for pH, ORP and Temp **(P/N: 1080771)**
- **DCM 511** - Controller package for pH, ORP and PPM on non-stabilized (CYA) water **(P/N: 1080772)**
- **DCM 512** - Controller package for pH, ORP, Free, Total and Combined Chlorine on non-stabilized (CYA) water **(P/N: 1080773)**
- **DCM 513** - Controller package for pH, ORP and PPM with CYA stabilized water **(P/N: 1080774)**

NSF

Certified to NSF/ANSI Standard 50

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

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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)	
	1. Acid Feed 2. Oxidant Feed 3. Chlorine boost / caustic feed 4. CO2 feed 5. Auto Fill / alarm	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	
Digital Outputs	4 (Fully assignable as dry contact sets or variable frequency pump)	
	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	
	Base feed available if sensor disconnected	
Analog Outputs	Optional 2 isolated, 4-20mA	
Control		
	On/off ORP assisting residual P/PI/PID Event timers UV boost / VFD control Chemical feed stop during Backwash or Bump	Chlorine boost / ozone control Flow restored delayed (adjustable) Emergency "off" for recirculation pump Autofill Chemical feed verification (optional) Pulsed pump speed
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	

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PN: 7750003
DCM_5_Series.indd rev.4 10/03/2018