

multiFLEX M5T/M10T Controller

Cooling Tower Controller



ProMinent®

The **ProMinent® multiFLEX** is a completely customizable microprocessor that provides the highest degree of control and flexibility. Unlock the full potential of your program using Plug and Play Technology and Trackster 3 software.

Standard Features

- Control multiple cooling towers
- Web browser accessible
- LAN accessible
- Up to 14 analog inputs or outputs
- Up to 12 digital inputs
- Up to 10 relay outputs
- Compatible with Trackster 3 software

Benefits

- **Flexible Control:** Multiple processes can be managed using any number of combinations with one controller.
- **Data Logging:** Detailed data history provides sensor minimum, maximum and average per each log period. Also records pump run times, pump feed volume, calculated drum levels, water meter volume and tower run time.
- **Exclusive Thermal Flow Switch:** Innovative design does not require user adjustment or calibration. Operates on 1GPM flow rate with no moving parts.
- **Feed Verification:** Highly accurate chemical feed with 1mL resolution. Calculates, displays and data logs chemical ppm based on system parameters. Alarms on failure to feed. Additional feature provides tank inventory and low tank level alarm without the use of level sensors.

- **Communications:** TModem, Ethernet TCP/IP and keypad programmable. Remotely monitor and control your water treatment program on any computer and from anywhere in the world with the use of a standard web browser. View our live demo at <http://controller.prominent.us:1000>
- **Plug and Play Onsite Upgrades:** The multiFLEX features Plug and Play technology allowing the user to perform simple and economical onsite upgrades.
- **multiFLEX Advanced Technology:** Maximize your treatment potential with ProMinent's exclusive features. Rate to Volume, Rate to Stroke, Timed Cycling and Time Modulation provide progressive control, taking your program to a whole new level!
- **Drum Level Management:** Provide digital low level indication or utilize our analog tank sensor to view level in gallons, inches or liters.
- **Trackster Software:** Trackster 3 Software completes the package, providing the ultimate in program management. Features such as customized live views, alarm notification, graphing and reporting of all I/O data with exporting capabilities, and email of historical data are all possible with the use of this powerful tool. View live demo: <http://controller.prominent.us:1000>

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Specifications

| Specifications | | | |
|--------------------------------------|--|--|---|
| | Rating - Detail | | Notes |
| Analog-Digital I/O | M5T | M10T | |
| Analog Inputs and Outputs | 1-7 inputs for sensors, 4-20mA inputs / 4-20mA outputs | 1-14 inputs for sensors, 4-20mA inputs / 4-20mA outputs | Auto configuration on driver installation & removal DC Isolated, Loop Powered |
| Digital Inputs | 6 Inputs | 12 Inputs | User configurable as water meters or contact sets |
| Relay Outputs | 1 SPST, 4 SPDT | 2 SPST, 8 SPDT | Fused in sets of 5 relays |
| Alarm Relay (optional) | Dry Contact set, unfused | | User selected NO or NC |
| Communications User Interface | M5T | M10T | |
| Keypad-LCD | 5 Key tactile feedback, Universal Characters 4 line x 20 Character, Backlit | | Scan rate 100 mS nominal User adjustable contrast |
| 10 Base T, TCP/IP Ethernet LAN | HTML, Telnet Micro Web Server User Definable IP address & port | | Password, User ID protected Browser shows controller in real time |
| Modem (optional) | 56K, V.90 Remote Telnet Access | | Dial-out on alarms to pager or PC |
| Data Logging | 600 Entries for each 26 inputs & 5 relays, Stored in XML format | 600 Entries for each 26 inputs & 10 relays, Stored in XML format | Adjustable from 5 to 1440 minutes per entry |
| Controls | M5T | M10T | |
| Relay ON/OFF | ON/OFF control | | Any relay can be configured for any control |
| Proportional 4-20mA (optional) | User defined control set by sensor or relay control | | Software ZERO & SPAN adjustments |
| Volumetric | User set, measure volume & pump on time then bleeds for user set volume | | Sequential control, measures make-up volume |
| Captured Sample | Sample, Measure, Blowdown, Resample user set timer | | Any sensor may be used |
| Interlocking | 1 to 4 contact set inputs, AND & OR support | | Relays OFF when contact set opens |
| Blocking | 1 to 4 relays may block any other relay feed | | Support for common Oxidant-Inhibitor |
| Alarms - Feed Limit Timers | Minutes per Actuation & DAY | | User defined on Feed Limit |
| Feed Verification (optional) | PPM calculation based on volume feed & cycles of concentration | | Fail to Feed is no volume counted after 30 seconds of pump ON time |
| System | M5T | M10T | |
| Electrical | 120/240 VAC, 50/60 Hz, Single Phase | | Switch Selectable |
| Fusing | 7.3 Amps @ 120VAC, 4.15 Amps @ 240VAC | | Relay Fused 1-5 & 6-10, 6.3 ea. Logic fused @ 1A |
| Surge Suppression | Relays 2-5 & 7-10 NO Contacts snubbed @ 0.1 uF | | Controller Isolated from AC line |
| Accessory Power | 15-22 VDC, Unregulated, thermally fused @ 200mA | | |
| Enclosure | Non-metallic, NEMA 4X, IP65 | | 11.5"W x 13.5"H x 7"D |



ProMinent Fluid Controls, Inc.
 136 Industry Drive • Pittsburgh, PA 15275 USA
 (412) 787-2484 • Fax: (412) 787-0704
 email: sales@prominent.us • www.prominent.us

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