

# The Next Generation of Wireless Real-Time Alarm, Monitoring, and Remote Control

All of the functionality of the M110 and M800, with an onboard interactive display and enhanced electronics.

## MyDro 150 and 850 RTUs

### Easy to Install

Each remote terminal unit (RTU) includes the necessary hardware for installation, such as a cellular radio, enclosure, backup battery, transformer, antenna with cable, and mounting hardware. Purpose-built RTUs simplify and speed installation. There is no programming required, and RTUs are self-enrolling.

### Reliable Wireless Communications

RTUs operate on current generation cellular radios for dependable data transmissions. Mission maintains direct relationships with the largest cellular carriers in the U.S. and Canada to ensure the best service possible. There are no radios to license or cellular contracts to set up.

### Real-Time Alarms Delivered To All Devices

Real-time alarms are delivered via phone call, text message, email, fax, pager, and even to your existing HMI software through an OPC data link. Each alarm is logged with a timestamp for tracking and reporting. The alarm call-out schedule setup is easy, flexible, and intuitive, to be as simple or sophisticated as you want it to be.

### Managed Service—The Complete Package

The Mission system includes all cellular data service, data storage, alarm call-outs, reports, and on-call, 24-7-365 technical support. The highly reliable turnkey system offers more features at a lower cost than an in-house setup. No engineering or programming is required, and there are no networks to maintain.

View your data and reports using the included Mission 123SCADA software, accessible on your secure web portal from any web-enabled device. 123SCADA is the newest Mission user interface designed with the look and feel of industry-standard HMI SCADA that is packed full of new features, as well as the legacy user mode. Tabular and graphical reports can be used for compliance reporting and comparative studies. As always, system enhancements are included at no cost and are immediately available.



## M150 RTUs

### Real-Time Alarms with Hourly Summaries

M150s summarize pump run times and pump starts hourly. All alarm data is reported in real-time. Analog data and RTU status are reported hourly. Simultaneous pump runtimes can be reported when two pumps run.

## M850 RTUs

### Real-Time Alarms and Streaming Data

M850s report pump starts and stops in real-time. Analog values are reported every two minutes or on 5% change. Volumetric flow calculations can utilize this information along with sump volume (as determined by an analog level sensor or fixed entries) to calculate hourly volumetric flows.

### Remote Control

Expand your system with optional remote control for offsite wells, tanks, gates, chlorine dosers, variable frequency drives, and more. Optional automatic remote control interfaces include the Tank and Well Control Package, Digital Intertie, and Analog Intertie.



## LCD Touch Screen

- Displays current status
- Supports local configuration

## Radio

- Cellular radios support LTE, 4G, 3G, and 2G for both GSM (AT&T and partners) and CDMA (Verizon and partners)
- No radio licenses or site path studies required

## Expandable

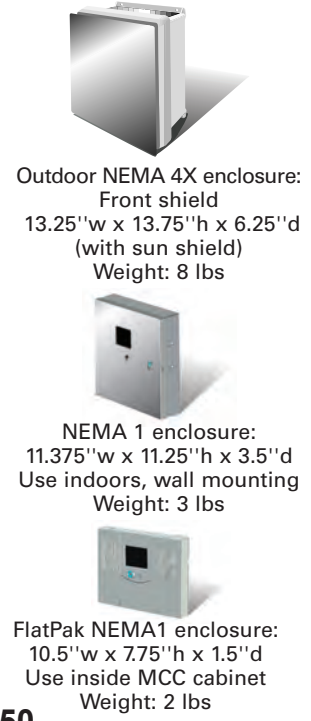
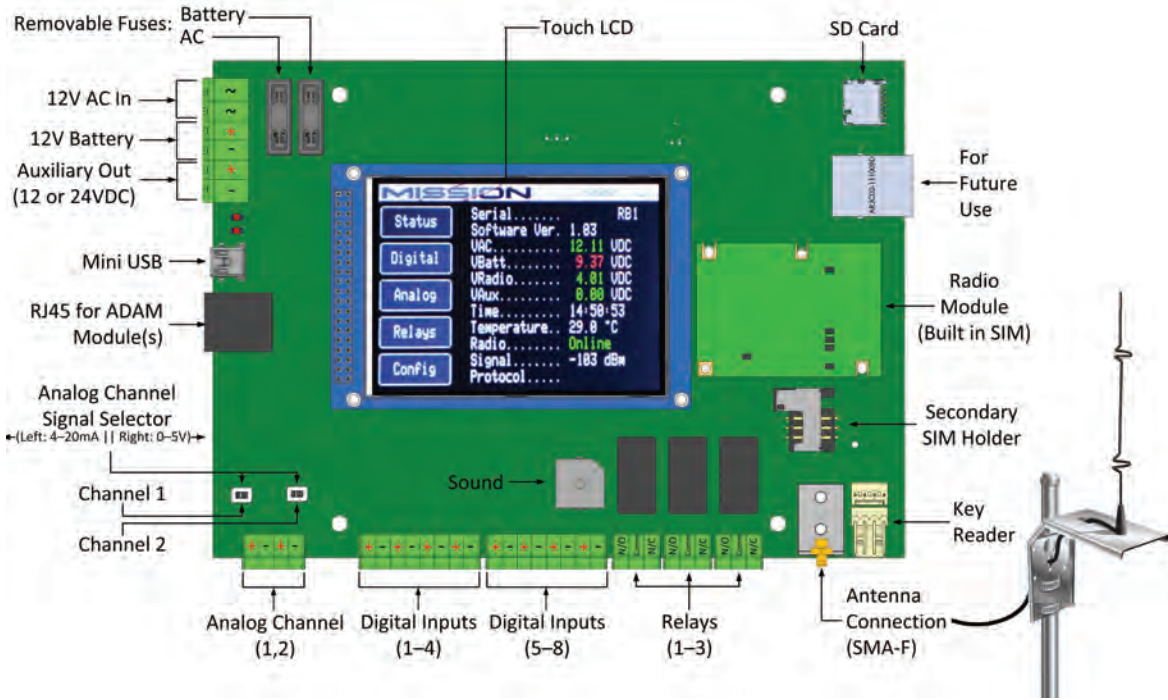
- Up to 16 digital inputs, six analog inputs, two pulse inputs, and two analog outputs, simultaneously
  - Onboard digital inputs configurable for wire fault supervision or strap on load sensor for easier pump run indication
  - RS485 for digital, analog, and pulse expansion

## Enhanced

- 12 or 24VDC auxiliary output for battery-backed analog instrument loop power
- Over-the-air upgradable firmware

	M150	M850
Application	Wastewater	sewage lift station, industrial water quality (WQ) alarming, lift station generator alarming
	Water	master pump station monitoring and remote control, critical process monitoring, open channel flow monitoring, sewer station power monitoring, reuse water monitoring and control
	Other	gate status alarming, rainfall monitoring
Application	Water	septic overflow and billing, custody transfer and billing, canal level monitoring and gate control, I&I flow and level data logging
	Other	pump station alarming, reservoir level alarming, remote valve alarming, chlorine (Cl) residual WQ alarming, flow or pressure alarming, pressure reducing valve station alarming pump station monitor, tank and multiple well control, remote valve monitoring and control, Cl residual WQ, flow or pressure monitoring

# Technical Specifications



## M150

## M850

	M150	M850	
<b>Data</b>	Alarm Data	Real-time	Real-time
	Pump State	Summarized hourly	Real-time
	Analog Reporting	Current value reported hourly	Every two minutes, or on 5% change
	Device Health	Built-in inputs reported hourly	
<b>Input / Output</b>	Digital Inputs	Eight on-board digital inputs (dry) with selectable wire fault supervision, or direct attach load sensor (for easiest pump run indication) Expandable to 16 with PN OP653  Three configurable for pump run summary reporting (number of starts and run time each hour). Simultaneous runtimes reported when two pumps are monitored.	
	Analog Inputs	Two on-board, 4–20mA "isolated" or 0–5VDC. Four alarm set points each. Expandable to six with PN OP465.	
	Relay Outputs	Three remotely controllable, form C, dry contact relay outputs, 5amps at 30VDC, 120VAC, SPDT, NO/NC	
	RS485	Support for specified expansion modules	
	Pulse Inputs	Two channels with PN OP464 Fifteen minute reporting	Two minute reporting
	Analog Output	Two channels (0–5V or 4–20mA) with PN OP461	
	Electronic Key Reader	Key reader for site activity tracking and service mode	
	Built-in Inputs	AC voltage, battery voltage, board temp and signal strength. Optional second key reader.	
<b>Electrical</b>	AC Power	Supervised 120VAC to 12VAC, 1.2amp, UL-recognized class II/class III transformer	
	Backup Power	12V, 5AH battery standard, with enhanced charging system Up to 50 hours	Up to 18 hours
	Auxiliary	Auxiliary output selectable 12VDC or 24VDC for battery-backed analog instrument loop powering. 250mA max.	
	Removable Terminals	Included: Amphenol PN 20020008-G061B01LF (6 pin for power), 20020004-D081B01LF (D08, D04, D03 for I/O)	
<b>Other</b>	Enclosures	FlatPak (PN M153), NEMA 1 (PN M151), NEMA 4X (PN M152) Large NEMA 4X (PN M152L)	FlatPak (PN M853), NEMA 1 (PN M851), NEMA 4X (PN M852) Large NEMA 4X (PN M852L)
	Environment	Operating temperature -20–75°C, non-condensing	
	Cellular Radio	Radios make live, continuous, encrypted TCP socket connections. Payload is end-to-end acknowledged. Penta band (850, 900, 1700, 1900, 2100 mHz). AT&T and partners: LTE, HSPA+, 3G. Verizon and partners: LTE, EVDO, 1XRTT, dual SIM (carrier) capable.	
	Antenna	Omnidirectional antenna with 11' cable, SMA termination, universal mounting bracket	
	Options	Optional SCADA integration OPC link (PN SW586) to client/server HMI, Tank and Well Control Package (see accessories brochure for details)	
	Service	Requires Service Packages for the unit and optional expansion boards (see accessories brochure for details)	
	Warranty	One year manufacturing and material warranty	



(877) 993-1911 • sales@123mc.com • 123mc.com