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

All of the functionality of the legacy series (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 all necessary hardware for a standard 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, page, and even to an existing HMI software through an OPC data link. Each alarm is logged with a time stamp for tracking and reporting. The alarm call-out schedule is easy, flexible, and intuitive to set up.

**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 data and reports using the secure 123SCADA web portal, accessible from any web-enabled device. The 123SCADA user interface is designed to mimic industry-standard HMI SCADA and also includes a legacy user mode. Tabular and graphical reports can be used for compliance reporting and comparative studies. System enhancements are available immediately and included at no cost.

**M150 RTUs**

**Real-Time Alarms with Hourly Summaries**

M150 RTUs summarize pump runtimes 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**

M850 RTUs report pump starts and stops in real-time. Analog values are reported every two minutes or on a five percent 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 flow rates.

**Remote-Control**

Expand system operations with optional remote-control for off-site wells, tanks, gates, chlorine dosers, variable frequency drives, and more. Optional automatic remote control interfaces include the Tank and Well Control Package, Digital Interconnect, and Analog Interconnect.

<table>
<thead>
<tr>
<th></th>
<th>MyDro 150</th>
<th>MyDro 850</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wastewater</strong></td>
<td>Sewage lift station, industrial water quality (WQ) alarming, lift station generator alarming</td>
<td>Master pump station monitoring and remote-control, critical process monitoring, open channel flow monitoring, sewer station power monitoring, reuse water monitoring and control</td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td>Pump station alarming, reservoir level alarming, remote valve alarming, chlorine (Cl) residual WQ alarming, pressure reducing valve station alarming</td>
<td>Pump station monitoring, tank and multiple well control, remote valve monitoring and control, Cl residual WQ alarming, flow or pressure monitoring</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Gate status alarming, rainfall monitoring</td>
<td>Septic offload and billing, custody transfer and billing, canal level monitoring and gate control, I&amp;I flow, level data logging</td>
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</tbody>
</table>
## Technical Specifications

### Alarm Data
- **MyDro 150**: Real-time
- **MyDro 850**: Real-time

### Pump State
- **MyDro 150**: Summarized hourly
- **MyDro 850**: Real-time

### Analog Reporting
- **MyDro 150**: Current value reported hourly
- **MyDro 850**: Every 2 minutes or on 5% change

### Device Health
- **MyDro 150**: Built-in inputs reported hourly

### Digital Inputs
- **MyDro 150**: 8 onboard, dry digital inputs with selectable wire fault supervision or direct attach current sensing switch; Expandable to 16 with PN OP653
- **MyDro 850**: 3 configurable for pump run summary reporting; Simultaneous runtimes reported when 2 pumps are monitored

### Analog Inputs
- **MyDro 150**: 2 onboard, 4-20 mA isolated or 0-5 VDC; 4 alarm set points each; Expandable to 6 with PN OP465
- **MyDro 850**: 8 configurable for pump run; Pump states reported in real-time. Simultaneous pump runtime reporting supported for up to 7 pumps

### Relay Outputs
- **MyDro 150**: 3 remotely controllable, form C, dry contact relay outputs; 5 A at 30 VDC, SPDT, N/O, or N/C
- **MyDro 850**: Support for specified expansion modules

### Pulse Inputs
- **MyDro 150**: 2 channels with pulse input expansion module (PN OP464)
- **MyDro 850**: 15-minute reporting

### Analog Output
- **MyDro 150**: 2 channels (4-20 mA or 0-5 V) with PN OP461

### Electronic Key Reader
- **MyDro 150**: Key reader for site activity tracking and service mode

### Built-in Inputs
- **MyDro 150**: Key reader for site activity tracking and service mode; Optional second key reader

### AC Power
- **MyDro 150**: Supervised 120 VAC to 12 VAC, 1.2 A, UL-recognized class II/class III transformer

### Backup Power
- **MyDro 150**: 12 V, 5 Ah battery standard with enhanced charging system
- **MyDro 850**: Up to 50 hours
- **MyDro 850**: Up to 18 hours

### Auxiliary
- **MyDro 150**: Auxiliary output selectable 12 VDC or 24 VDC for battery-backed analog instrument loop powering; 250 mA max

### Removable Terminals
- **MyDro 150**: Included: Amphenol PN 20020008-G061B01LF (6 pin for power), 20020004-D081B01LF (D08, D04, D03 for I/O)

### Power Consumption
- **MyDro 150**: 4.2 W

### Enclosures
- **MyDro 150**: FlatPak (PN M153), NEMA 1 (PN M151), NEMA 4X (PN M152), Large NEMA 4X (PN M152L)
- **MyDro 850**: FlatPak (PN M853), NEMA 1 (PN M851), NEMA 4X (PN M852), Large NEMA 4X (PN M852L)

### Environment
- **MyDro 150**: Operating temperature -20–60°C, non-condensing

### Cellular Radio
- **MyDro 150**: 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

### Antenna
- **MyDro 150**: Omnidirectional antenna with 11" cable, SMA termination, universal mounting bracket

### Options
- **MyDro 150**: Optional SCADA integration OPC link (PN SW586) to client/server HMI, Tank and Well Control Package (see Accessory Catalog for details)

### Service
- **MyDro 150**: Requires Service Packages for the unit and optional expansion boards (see Accessory Catalog for details)

### Warranty
- **MyDro 150**: One-year manufacturing and material warranty

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**Outdoor NEMA 4X enclosure:**
- 13.25" w x 13.75" h x 6.25" d
- With sun shield
- Weight: 7.6 lbs

**NEMA 1 enclosure:**
- 11.375" w x 11.25" h x 3.5" d
- Use indoors, wall mounting
- Weight: 3.6 lbs

**FlatPak NEMA 1 enclosure:**
- 10.5" w x 7.75" h x 1.5" d
- Use inside MCC cabinet
- Weight: 1.8 lbs