

CSO/SSO Tracking and Alarm System

The M-80 system tracks manhole surcharges and overflows. The wireless system has no phone lines, is battery driven, sends alarms, compiles reports, installs in about an hour, and is very affordable.

Track Manhole Surcharges and Overflows

When effluent backs up into a manhole and trips a float, the M-80 notifies you and tracks the time and duration of the surcharge or overflow. With two floats (included), rate of rise estimates can be made.

Waterproof, Self-Contained, and Safe In Sewers

The M-80 electronics, radio, and battery are housed in a watertight polycarbonate container. All electronics are conformal coated for long life. All exposed metal hardware is made from 316 stainless steel.

Simple To Install and Maintain, 5 Year Battery Life

The M-80 is installed in the manhole "neck" without any manhole cover modifications. The one hour installation can be completed with ordinary tools, and does not require entry into the manhole.

Reliable Wireless System, No Phone Lines

With no phone lines or power to run, installation is easy. The communications are wireless with the antenna installed in the road. Communications are very reliable with amazing coverage.

In-Road Antenna, Whole System Underground

The antenna is completely below the road surface. This proprietary technology and installation method means reliable performance even in low signal strength areas.

No Programming, Web Setup of Alarm Notification

The M-80 requires no field programming. All alarm notification set up is performed using the intuitive, easy-to-use customer web site that MISSION provides. Alarms go to phone, pager, fax, email, or OPC.

It's Simple, Reliable, and Affordable

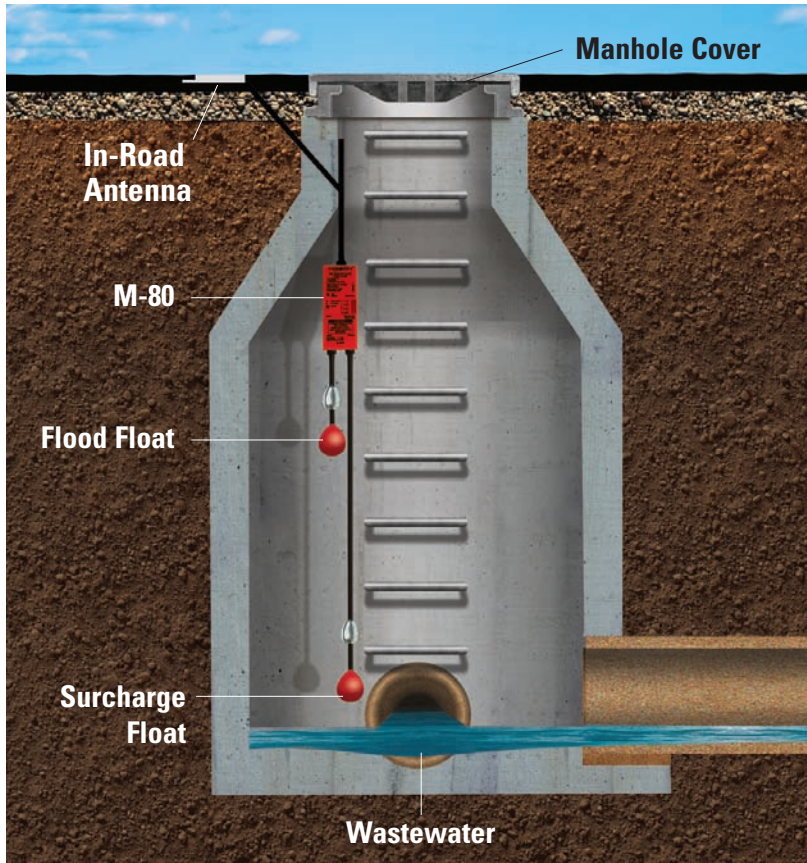
There are no radios to program, cellular contracts to set up, software programs to buy, or roads to dig up. And with the low cost of an installed system, MISSION makes it as simple as 1, 2, 3.



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Details

The M-80 is ideally suited for EPA-mandated monitoring and for proactive sewer flow monitoring programs. Couple the M-80 data with MISSION Model 110/800 series pump station and rainfall monitoring units, and clear pictures begin to emerge as to what is happening in your sewers.



The M-80 electronics and enclosure are designed to meet the requirements for use in Class 1, Division 2, Groups C and D hazardous environments. Functional status of the unit is easily verified via sealed, on-board LEDs. The M-80 enclosure hangs one foot below the manhole entrance, and is secured to the manhole lip leveling bricks or mounts directly to the manhole neck via a stainless steel masonry bolt. The M-80 uses simple, reliable, normally closed sewer floats to detect liquid levels. The unit can accommodate two floats (included). Ongoing maintenance is easy as the entire assembly can be pulled from the manhole for later inspection without entrance into the sewer.

When a float detects an alarm level, the M-80 sends an alarm over the data channels of the cellular network to the MISSION Control Center. MISSION archives all events and automatically notifies customer personnel via phone, pager, fax, or email. MISSION can also send this data to existing SCADA system software such as WonderWare® and Intellution®.

The M-80 is designed to provide over 5 years of reliable service with the included battery. Surviving the sewer environment is half the battle; proving it works continuously is the other. The M-80 sends test messages automatically every 3 days. These test signals document cellular data channel signal strength and battery level. All check-in tests are logged and "failure to report" messages are automatically sent to customers.

Technical Specifications

Radio:

- 3G Cellular Modem
- Dual Band 850/1900 MHz
- 3 W Max Transmit Power
- 100 mSec Data Burst

Power Source:

- 3 VDC Lithium Battery
- 120 Watt-Hour Capacity
- 5 Year Nominal Lifetime
- or- 2000 Transmissions

Inputs:

- 2 Dry Contact Inputs
- Alarm on Opening and Closing
- One Minute Delay
- Nuisance Alarm Prevention

Connections:

- 316 Stainless Steel Hardware
- 12" Securing Wire with End Loop

Diagnostics:

- 4 Sealed High-Intensity LEDs
- Installation Suitability
- Radio Transmit
- Tower Acknowledge
- Input 1 open/close
- Input 2 open/close

Floats:

- 2 Wire, Normally-Closed
- 90 Degree Open
- Lead Weighted
- 20' Cable Length.

Environment:

- Class 1, Div 2 Groups 3 & 4
- Hazardous environments
- Conformal Coated Internal Circuit Boards

Waterproof:

- To 10 Feet Underwater (3.0 Meters)

Temperature:

- Operating: 0 to 60 deg C
- Storage: -20 to +70 deg C

Enclosure:

- Ultrasonically welded, polycarbonate

Physical:

- 3.25" w x 1.5" d X 10" L
- 1.5 lbs.

Warranty:

Five (5) Years replacement for hardware due to leakage, battery, parts or performance. Based on 250 transmissions per year.