

AVFM

Area-Velocity Flow Monitoring System for Stormwater Infrastructure

Component Images



Specifications, Installation & Applications

Data Acquisition Rate	10-min (std)
Velocity Range	0.1 ft/s to 20 ft/s
Velocity Accuracy	+/- 2% of reading +/- 0.04 ft/s
Level Range	1 in. to 180 in.
Level Accuracy	+/- 0.25% of reading +/- 0.08 in.

Post-Construction Installation

Open Channel (non-pressurized) Systems

- Flow Velocity
- Flow Depth
- Volumetric Velocity

Wireless (cellular) Data Transmission

- Cat-M1 cellular (2G, 3G, 4G LTE compatible)

Power & Mounting Options

Computer & Power Supply:

- 12 VDC
- Battery (deep cycle, AGM, 100 Ah) with Solar-Panel Recharge
- Stand-Alone Pole Computer Support Option
- Existing Pole Computer Support Option

Sensor

- Mechanical Mount – Open Channel System Invert

Exposure Allowance & Compliance

- FCC and RoHS
- Computer & Battery Enclosure – IP67
- Integral Cellular Antenna in IP67 Enclosure
- Operating Temperatures:
 - Fahrenheit: -30 to 120 deg F
 - Celsius: -34 to 49 deg C

Features



Nationwide cellular connectivity (Wi-Fi option)



Flow level & velocity measurements for:

- Round pipe systems
- Trapezoidal channel systems
- Elliptical pipe systems
- Other custom open channels
- Non-pressurized flow



Browser-based dashboard (viewing and data download). Advanced notice of potential problems. Data visualization. Data-driven maintenance notification.



Flow monitoring system to complement other sensor systems (synchronized data)

Maintenance (low to zero)

- Modular Plug-and-Play (sensors, computer, battery, solar panel)
- Remote Health Assessment of Battery via Dashboard
- Visual Inspection of Solar Panel (bi-annual)