

SmartFLOE™ Open Channel Flow Estimation

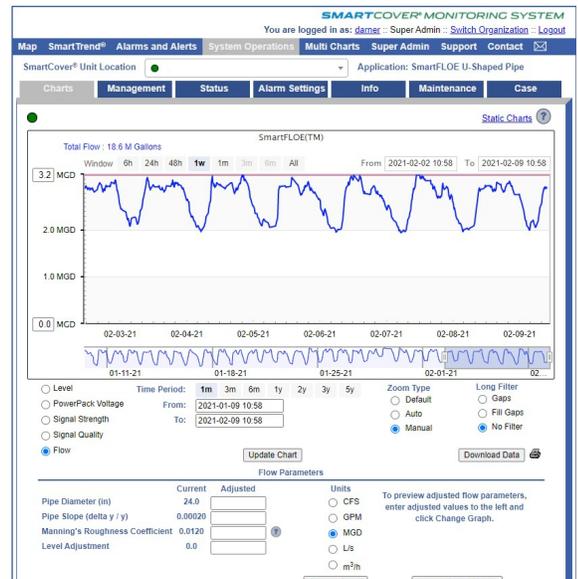
Flow level optimized estimation (FLOE) is a tool within the SmartCover solution suite, providing a low cost, low maintenance, highly reliable means for flow measurement and reporting. Conventional flow measurement methods can be expensive and complex where reliability, ease of maintenance and data communications are often challenging. With our no confined space entry installation and service as well as satellite communication, SmartFLOE is more flexible and reliable than AV meters with faster results, lowest cost of ownership and reduced risk.

How it Works

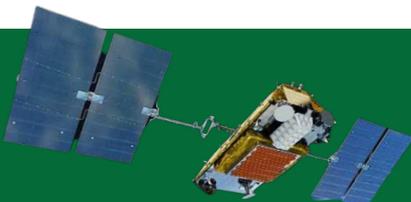
Monitoring flow measurement is highly valuable for any open channel water conveyance. By applying Manning's equation to water level, SmartFLOE™ is a cost effective means to estimate flow rates in open channels. In addition to flow measurements, SmartFLOE enables receipt of vital data to detect surcharge conditions and prevent overflows. Manning's equation is used quite successfully for estimating flow when conditions are uniform and steady without significant change inside the pipe over time.

SmartFLOE is effectively used for:

- Tracking inflow and infiltration (I&I) when combined with rain data
- Capacity assessments
- Influent & effluent measurements
- Environmental and storm water flows
- General flow monitoring
- Bypass monitoring
- Determining wet vs. dry weather ratios



Calibration can be matched to within 1% of A/V meter results



With satellite based data transmission, your sewer status connection is maintained even during cell outages and the most severe weather.

SmartFLOE™

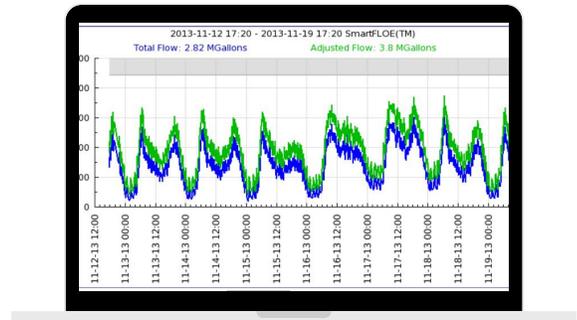
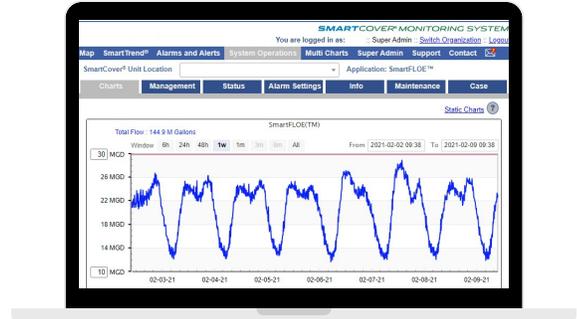
Open Channel Flow Estimation

Where it Works

For best results, when selecting a site for SmartFLOE, follow these guidelines:

- FLOE is most accurate on larger lines; smaller lines with low flow can result in sub-optimum results.
- Position the sensor at the inflow side of the manhole.
- A location with one straight pipe, without slope or shape changes, upstream from where the sensor is measuring water level.

If a target manhole has less than optimum conditions, it's possible to use SmartFLOE on one or two manholes upstream or downstream from your target location where conditions may yield better results.



Featuring

- Hardware components engineered to function in wet, humid, corrosive conditions
- Flexible patented sensor designs and deployment
- **NO CONFINED SPACE ENTRY*** installation or service
- Reduces traffic management resources
- Secure, online dashboard with easy-to-read, visual reports
- Compact, long lasting battery
- Two-way communications permits remote settings management
- Fusion with rain, river and tide data
- Done-for-you analytics
- Works when there is no power
- Satellite coverage works with sites difficult to access and withstands cellular outages
- Variable timing options for data scan and notifications
- Built in tilt switch for real time entry detection
- Encrypted secure servers with redundancy
- Mobile app for iOS and Android
- API available
- Configurations for open channels, canals, holding tanks, lift stations, outfalls, reservoirs, and utility vaults

*as defined by OSHA 29 CFR 1910.146b



With the SmartCover mobile app, get the insights you want, when and where you need them. Available for both iOS and Android devices.