

Convenient Open Channel Flow Estimation

SmartFLOE[™] flow level optimized estimation provides a low cost, low maintenance, high reliability means for flow measurement and communication. Flow measurement is highly valuable for any open channel water conveyance. Conventional flow measurement methods can be expensive and complex where reliability, ease of maintenance and data communications are often challenging.

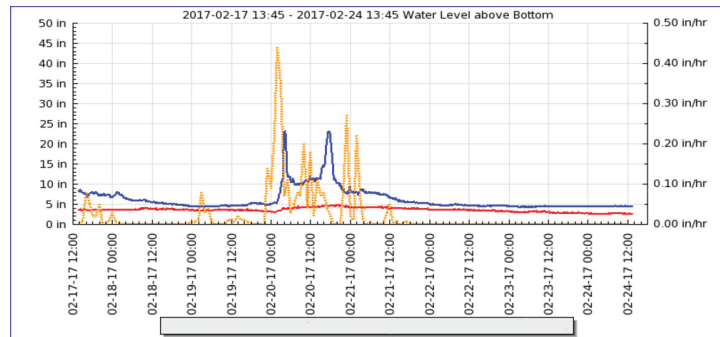
SmartFLOE can be used in a variety of applications including:

- Wastewater collection systems
- Storm water systems
- Raw water conveyance systems
- Any open water channel



About Flow Estimation

Flow level optimized estimation (FLOE) is a new approach to using the well-proven Manning's equation providing users with a cost effective means to acquire data for estimating flow rates in open channels.



System Status Alerts and Alarms

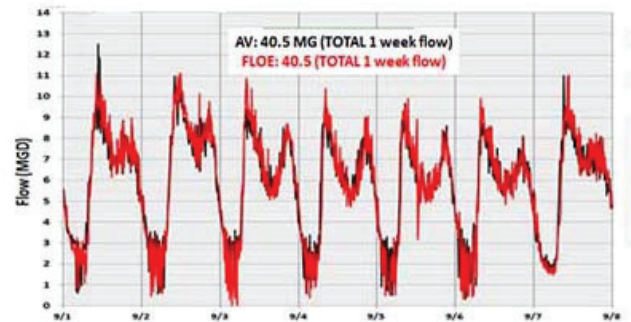
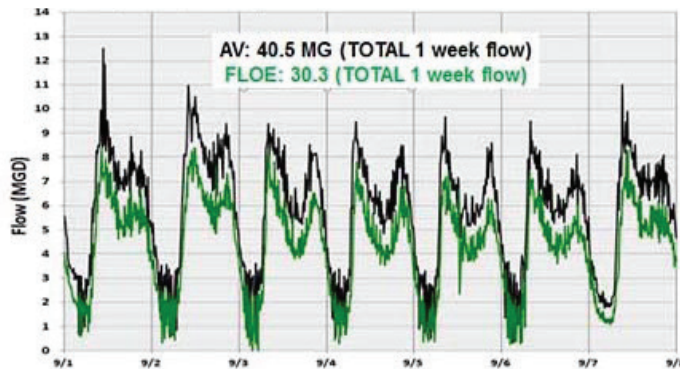
SmartFLOE enables receipt of vital information including level alarms and water flows to prevent SSO/CSO. With user-defined alarm settings, the system warns of impending overflow issues before they occur, communicating to assigned personnel via email or text. Users are informed of the system's operating status so maintenance can be planned well in advance.

Installation and Relocation

The **SmartFLOE** user-configurable algorithm provides flow rate data. For modeling, users can change parameters, such as pipe diameter or slope for an instantaneous view.

Features and Specifications

- Uninterrupted monitoring from any location through battery operation and satellite communication.
- Ongoing data capture and transmission for analysis.
- Highly secure and easy-to-use web browser viewing.
- User-defined, on the fly parameter selections.
- Easy, fast installation with minimum maintenance required.



SmartFLOE[™] Specifications

SmartLevel [™] Unit	
Weight	4.5 lbs.
Size	5" x 6" x 6"
Power	3.6 VDC SmartCover [®] PowerPack [™]
Battery Life	24 months - nominal
Environmental	NEMA 6P, IP-68
Mounting	Mechanical Mount
Antenna	Low profile traffic rated reflector or round type
Level Sensor Range	3 inches to 81 inches with option to 20 feet
Level Sensor Resolution	0.1"
Intrusion Detection	3 – axis, continuous
Temperature Range	-40°C to 80° C

SmartFLOE [™]	
Method	2 way, wireless direct to satellite
Internal Reporting	Upon alarm and at 1 hour intervals
Status Data	Flow rate estimates, water level, PowerPack [™] voltage, radio signal strength, maintenance alerts, alarms and acknowledgements
User Interface	Map GIS, graphs, maintenance and location logs, report and downloads
Security	2048-bit, SSL, username and password protection

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