

FlexFlow IQ

OPEN CHANNEL MONITORING

The FlexFlow IQ flow sensors offer maintenance-free, non-contact open channel monitoring, including sewer flow monitoring that can be portable or permanent. FlexFlow IQ is particularly suited for monitoring open channels, utilizing a sophisticated combination of digital radar velocity sensing and radar depth sensing to provide continuous flow measurements. FlexFlow IQ is available in both wireless and standard versions that can be integrated directly with PLCs.

The FlexFlow IQ sensors are well-suited for uninterrupted functioning in the toughest situations, which may include high solids content, high temperature, shallow and caustic flows, large man-made channels, and high velocities up to 65 ft/s. Since they are installed outside the process flow, there is no fouling by grease or debris, ensuring that no flow data is lost. The sensors typically remain reliable and steady for up to three years without site calibration, and can maintain their accuracy even in low flow depths up to surcharge conditions.

Installing the FlexFlow IQ sensors is easy and straightforward, as they come with mounting brackets that require no additional in-pipe bands or rings. Temporary cross-bar mounts are also available for convenience.



ORDERING INFORMATION

Ordering Information Code:

FLEXFLOW-FN

FlexFlow IQ for Sensus FlexNet

Wireless Flow end-node for Wastewater Monitoring

FLEXFLOW-GSM

FlexFlow IQ for GSM Networks. Wireless Flow end-node for

Wastewater Monitoring

FLINT

Installation kit for FlexFlow IQ

US3-DH

Data Hosting & Monitoring Services

FEATURES

- Flow, level and velocity outputs
- Non-contact measurement
- Uses rotatable swivel and easy mounting
- Sensor is away from the water, making the installation safer to achieve
- Standard interfaces for communication with data loggers and other devices
- Extremely low power consumption
- Anti polarity protection
- Compact and solid design – long sensor life with minimal maintenance
- RS-485 interface – allows a connection cable length of up to 1,000 m, allowing data logger and power source to be situated further away
- Wide range of power supply from 7-32 V (typically 12 / 24 V) – allows differing power supplies such as solar panel, battery or grid.

SUITABLE APPLICATIONS

- Rivers/Streams
- Sewer Systems
- Canals
- Irrigation canals
- Process Water Canals
- Outlets / Inlets

SPECIFICATIONS

GENERAL

- Network Interfaces:** GSM, Modbus RTU, Flexnet, LoRaWAN
- Internal Pwr Supply:** 13.0 Lithium Thionyl battery or external 12-30V power adaptor
- Consumption:** 40uA for normal operation 200mA for alarm messaging
- Dimensions:** 130 x 130 x 75mm
- Depth Rating:** 0 - 20m
- Type Approval:** PTCRB, GCF. FCC, CE, RoHS

PERFORMANCE

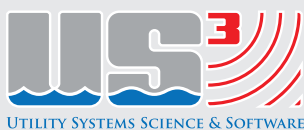
- Velocity:** ±0.098ft/s - 65 ft/s or 0.03-20m/s
- Accuracy:** ±0.1 ft/s or ±0.03m/s
- Level Measurement:** 131 ft or 40m
- Accuracy:** ±0.4inch or ±10mm

ENVIRONMENTAL

- Operating Temp:** -20°C to 65°C
- Storage Temp:** -40°C to 85°C
- Relative Humidity:** 0 to 95%, non-condensing
- Enclosure Rating:** IP68

MECHANICAL

- Housing Materials:** PPA High Performance Polyamide
- Cable:** Conductor, PVC jacket, 22 AWG, 4.6cm (18") pigtail [user-exextendable for RS-485 communication up to 1500m (5000ft)]



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