





Ultrasonic Level Monitoring System

ADS ForeSTE UL

For Storm, Surface Water, and Environmental Water Applications

The ForeSITE™ UL (FS-UL) system is designed to enable cost-effective, easy-to-setup and reliable monitoring of water levels for a wide variety of applications and locations.

Stormwater	Vaults
	Outfalls
Surface/Environmental Water	Lakes & reservoirs
	Lagoons
	Rivers & streams
	Canals & channels
	Tidal gates and structures
Flood Control	Streets
	Underpasses
	Parks
	Other flood-prone
	structures and locations
Irrigation	Canals & channels
	Flow control structures



FS-UL mounted over a stormwater vault





FS-UL mounted over an open-channel

The system is designed for direct mounting above the water surface. This non-contact monitoring system provides measurements at user-prescribed intervals with ± 0.04 inches (± 1 mm) accuracy. Data is stored in non-volatile flash memory and wirelessly communicated.

The cellular option provides support for CAT-M1 and NB-IoT Networks. Host compatibility is ensured with integrated support for DNP3.0 and FTP data protocols. Depending on communication and measurement intervals, battery life can exceed 5-years.

The monitoring system includes a fully integrated and stabilized ultrasonic sensor, exceptionally long-life battery, high performance antenna, start-up software for fast, easy configuration and setup, cloud-based software for ongoing data capture and graphical visualization, mounting bracket, and installation accessories.



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FS-UL Level Monitor Specifications



System Components

FS-UL data logger with modem, internal battery pack	
External antenna	
Mounting bracket	
SIM Card	
Start-up software	
Data storage and analytics software	







FS-UL and mounting bracket

System Specifications

Sensor	1x Integrated ultrasonic level sensor, +/- 0.04 in. (+/- 1 mm) resolution
Measurement range	12 in. to 196 in. (300 mm to 4999 mm)
Alarms	4x user-configurable alarm limits on Ultrasonic level Input
Memory	2,000 events stored in non-volatile, flash memory
Communications	4G/LTE CAT-M1/NB-IoT
Logging	Configurable, time-stamped, 1-second to 1-day regimes
Antenna	Internal and external (via SMA connector)
Power	High capacity, 3.5-8.5 VDC
Humidity	0 to 90% relative humidity, non-condensing
Dimensions	Cylinder: 3.5 in. H x 4.9 in. D (90 mm H x 125 mm D)
Submersion	IP68
Temperature	–20° to +65° C Celsius (-4° to 149° F Fahrenheit)
System Status	Cell Network RSSI, RTU temperature, RTU battery voltage



