

Battery Operated Tank Monitoring

Part Number: TLM03-C
TLM03-E
TLM03-E-GPS

Description

InvigiSense is an easy to install, web based sensor solution. No cables, tapes or floats required. Simply screw the sensor into a standard 2" tank port and view the data online using the device of your choice, including your smartphone. Alerts are automatically emailed when tank needs servicing. Available with GPS.

Operation – Liquid Logistics

Cost effective InvigiSense systems greatly improve operational efficiency, by providing 24/7 tank monitoring which reduces costs and increases gross margins, eliminating the guesswork by preventing run-outs, overflows and spills.

Just-In-Time Collections and Deliveries

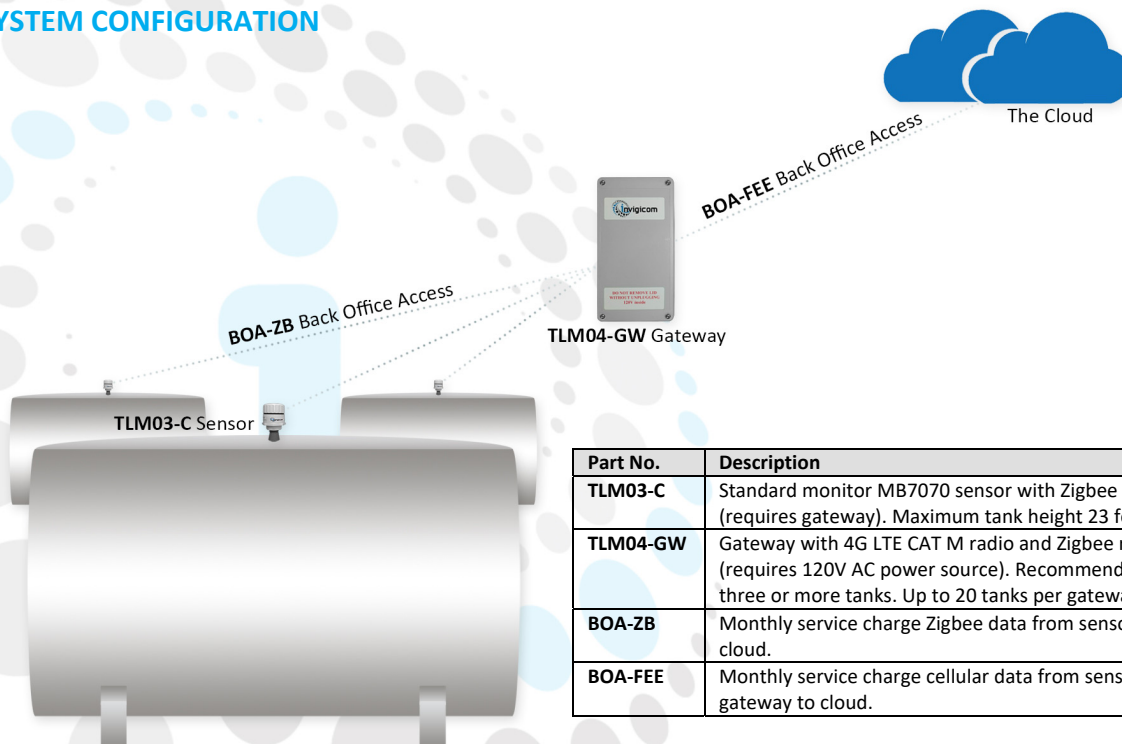
- **REDUCE COSTS**
Efficient truck routing reduces transportation costs. Eliminate manual tank measurement.
- **PROFIT & GROW**
Add customers without having to add more trucks or drivers. Maximize gallons per drop or pick-up. !
- **IMPROVE SERVICE**
Know when your customers' tanks need servicing before they do.



Eliminate Manual Tank Readings



SYSTEM CONFIGURATION

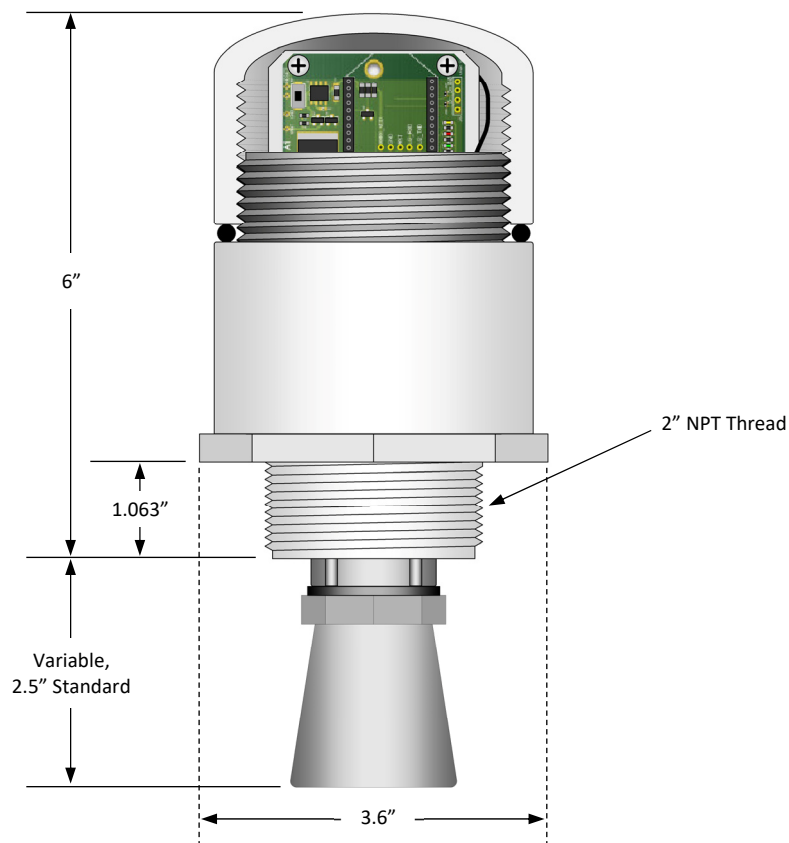


Part No.	Description
TLM03-C	Standard monitor MB7070 sensor with Zigbee radio (requires gateway). Maximum tank height 23 feet.
TLM04-GW	Gateway with 4G LTE CAT M radio and Zigbee radio (requires 120V AC power source). Recommended for three or more tanks. Up to 20 tanks per gateway.
BOA-ZB	Monthly service charge Zigbee data from sensor to cloud.
BOA-FEE	Monthly service charge cellular data from sensor or gateway to cloud.

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TLM03 SERIES SENSOR DIMENSIONS



SPECIFICATIONS		
General		
Measurement Method	Ultrasonic rangefinder	
Data	Range reading, Battery voltage	
Level Reading		
Range	Minimum Range ~8 inches, Maximum 25 feet (can be extended to ~34feet)	
Resolution	0.39 inches (1cm)	
Accuracy	Typical +/- 1-2" (Range reading is temperature compensated based on temperature probe inside the case)	
Reading interval	Programmable	
Calibration	Estimated gallons from depth in inches	
Electrical		
Power Supply	4 Energizer L91 AA Lithium batteries	
Radio Onboard	TLM03-E	TLM03-C
	LTE Cat M with support for AT&T, Verizon, Bell, Telus <i>*gateway not required*</i>	ISM 2.4GHz Zigbee Range: up to 300' Urban/indoor, up to 2 miles line of sight <i>*requires gateway to operate*</i>
Battery Life	TLM03-E	TLM03-C
	Typical 2 years at 2 reports per day (may be affected by temperature, cellular connection/outages and reporting rate)	Typical 2 years at 24 reports per day to nearby gateway.
Environmental		
Operating Temperature	-40°C to 60°C (Limited only by battery specifications)	
Certification	FCC	