

# SMARTank ST90 LTE



CPVC Enclosure with Teflon Sensor Assembly

## Wireless Tank Monitoring Solution Operating on LTE Networks

The SMARTank ST90 LTE cellular remote monitoring system combines several industry-first features that redefine what's possible with monitoring all types of vessels. Engineered specifically for a low profile so it sits below protective guards and out of the way, the ST90 LTE performs where others can't. It delivers highly accurate tank information, alerts, alarms and notifications whenever and wherever it's needed via the SMARTank Tank Level and Analytics Portal.

Easier than ever to install, the installer never has to open the lid – the unit is activated using a magnetic reed switch attached to the unit. Just connect the magnet to the magnet icon on the label, and it's done. The unit can be removed and redeployed at any time. Each system will be customized with the correct differential pressure sensor and appropriate cable. The CPVC enclosure around the electronics is manufactured with materials that ensure total compatibility with the wetted material being monitored.

Benefits of the ST90 LTE Series include the ability to always know the status of your tank inventory whether the tank is near you or 1000 miles away. You can eliminate run-outs and expensive emergency deliveries and will be able to optimize replenishment routes and deliver more product less often, thus cutting fleet, driver and fuel costs and making your organization more efficient and profitable.

## Tank Data That Drives Results

Our combination of high tech electronic hardware, cellular communications/local wireless communications and secure web portal provides system users complete visibility into the tank, giving you maximum control over distribution, inventory and vessel management.

Our SMARTank data portal delivers tank level, location, temperature and much more, available 24/7. Data and reports are at your fingertips, including:

- Tank Level
- Tank Locating (5 Ways, including GPS)
- Inventory Temperature
- Battery Strength
- Rate of Consumption
- Signal Strength
- Critical Low Alerts and Alarms
- Critical High Alerts and Alarms
- Usage History Report
- Efficiency Report
- Fill-detect Delivery Report
- Text/Email Notifications



Note the magnet icon just above the letters LTE. Simply touch the magnet there and you've activated the unit. No need to open the lid.

## Key Features

Future-ready – Operates on AT&T LTE or Verizon LTE cellular networks for longevity well into the future.

Easy to install by non-technical people. Lid is factory-sealed for maximum weather resistance and does not need to be opened in order to activate the device.

Host-Client LAN-WAN capabilities,  
Range: 300 ft. Line of Sight.

Outstanding battery life.

Low profile domed form factor, ideal for monitoring stackable totes and tracking shipping containers.

Innovative enclosure and internal antenna for enhanced chemical compatibility and durability.

Integrated GPS functionality for locating assets.

## Hardware Specifications

### Physical

Construction:	ROHS Compliant
Enclosure:	NEMA 4X; weatherproof, UL Approved (UL94V-0); CPVC
Process Fitting:	Simultaneous 2" NPT and 2" Buttress
Unit Gross Weight:	1.3 lbs (590g)

### Wireless Communications

Mode:	LTE Digital Wireless Radio with fallback to GSM/900MHz Wideband WLAN
RF Approval:	FCC Part 15 B approved
GPS Receiver:	Internal Antenna
LAN/WAN:	Wideband 900MHz, 300 ft. Line of Sight

### Performance

Output Voltage:	Nominally 14V/24V
Output Current:	Rated from 0-50mA
Load Regulation:	0.5% from @ 30mA load
Ripple:	50 mV Peak-to-Peak
Output Short Circuit Protection:	Current limited to 50 mA
Accuracy:	+/- 0.5 % Full Scale of Range (BFST)

### Environmental

Operating Temperature:	-13°F to 158°F (-25°C to 70°C)
Storage Temperature:	-40°F to 185°F (-40°C to -85°C)

## Key Benefits of the ST90 LTE

- Fast, simple installation - included magnet reed switch activates the device, making it unnecessary to open lid unless directed to by SkyBitz Customer Care
- Host-Client capabilities for lower costs than Host alone (where appropriate)
- LAN-WAN capabilities
- Industry's lowest profile - all parts protected
- Choice of sensors to ensure compatibility. A variety of sensors - with varying degrees of accuracy - are available for a multitude of applications, depending on needs and budget. Talk with your SMARTank sales representative for additional information on accuracy.
- Low cost LTE cellular technology
- Excellent battery life and OTA firmware updates
- Secure, reliable access to tank information when and where you need it