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 enclosure around the electronics is manufactured with materials that ensure total compatibility with the wetted material being monitored and is offered in two types:

- CPVC
- Polypropylene

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
- Fill-Efficiency Report
- Text/Email Notifications

Key Features

- Operates on AT&T 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 enclosures and internal antenna for enhanced chemical compatibility.
- Integrated GPS functionality for locating assets.
Specifications

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

**WIRELESS COMMUNICATIONS**
- Mode: GSM Digital Wireless Radio / 900MHz Wideband WLAN
- RF Approval: FCC Part 15 B approved
- Frequency Bands: GSM 850/1900MHz • WLAN 900MHz
- GPS Receiver: Internal Antenna, Optional External GSM 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

**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

- Host-Client capabilities for lower costs than Host alone (where appropriate)
- LAN-WAN capabilities
- Industry’s lowest profile – all parts protected
- Choice of enclosure to ensure compatibility
- Low cost LTE cellular technology
- Excellent battery life and OTA firmware updates
- Secure, reliable access to tank information when and where you need it