

SMARTank ST90

AC Powered Host

AC Powered Monitoring Solution

The ST90 AC Powered Host is an always-powered device. This new product is an adapted version of our battery-powered ST90 host. It can function as a host for other client devices to connect to specifically for bulk tank farms where there is access to AC power. This device can support more clients and if needed can be scheduled to report more frequently without worrying about impact to battery life. The AC Powered Host is suitable for many ordinary location environments.

Designed for Tank Farm Environments

Tank Farm environments require special considerations when deploying a monitoring solution. They have varying tank sizes, products and distances between them. Many have hazardous location restrictions as well. These variables can make monitoring in a cost-effective way a challenge.

The AC Powered Host serves as a central connection point for ST90 or ST95 client monitors on up to 32 individual tanks. However, sight line distances and obstructions may necessitate more than one host. By using clients to leverage the host's single point cellular connection, the customer can reduce the number of individual cellular connections required thereby reducing their total monthly service cost for the site. This AC Host can be used at sites that have existing power available.

Up-to-the Minute Reporting

The AC Host consists of a head telemetry unit with the radio components, a junction box with an AC to DC power converter, two 4-20mA inputs and a device service request button. The unit comes prewired with a 50-foot cable connecting the telemetry unit to the junction box so that the head unit can be placed high for optimal line-of-sight communication path with area cell towers and the connecting client devices. Mounting options for both components are available. If the remote mount option is utilized, it may be advantageous to mount the host at the same level as the remotely mounted clients. The service request button remains accessible for easy update of all clients reporting through the host. The junction box is prewired with a standard AC power adapter but can also be wired directly to pre-run power lines at the site. Technicians can configure the host-client setup in exactly the same way as existing ST90 hosts. The junction box also provides easy access to the 4-20mA connection terminals for wiring directly to existing sensor systems.

Once installed and configured, site managers and drivers can easily request an update from the host and all connected clients by pressing the button on the junction box to get an up-to-the minute reading.

The ST90 AC Host has all of the same features as the Battery powered ST90 Host including a compact rugged design, durable rating, reliable radio communication on either ATT or Verizon networks, GPS and temperature sensors, and accessory options for an easy to install solution.



Key Features

Designed for tank farm environments requiring special considerations.

Central connection point for client monitors on up to 32 individual tanks.

By using clients to leverage the host's single point cellular connection, the customer can reduce the number of individual cellular connections required thereby reducing their total monthly service cost for the site.

Once installed and configured, site managers and drivers can easily request an update from the host and all connected clients by pressing the button on the junction box to get an up-to-the minute reading.

A compact rugged design, durable rating, reliable radio communication on either ATT or Verizon networks, GPS and temperature sensors, and accessory options for an easy to install solution.

Hardware Specifications

Physical

Construction:	ROHS Compliant
Enclosure:	Polypropylene w/ Lexan Cover, Weatherproof, NEMA 4X, UL94V-0

Wireless Communications

Mode:	GSM Digital Wireless Radio / 900MHz Wideband WLAN
RF Approval:	FCC Part 15 B approved
Frequency bands:	LTE 700/850/AWS1700/1900MHz
GPS Receiver:	Internal Antenna, Optional External GSM Antenna

Performance

Output Voltage:	Nominally 14V/24V
Output Current:	Rated from 0-50mA
Load Regulation:	0.5% from 30mA load
Ripple:	50mV Peak-to-Peak

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 ST90 Series

- Ability to support up to 32 tanks
 - Up-to-the minute reading
 - Low cost cellular technology
 - Secure, reliable access to tank information when and where you need it
 - Reliable radio communication on either ATT or Verizon networks
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