

"ALWAYS ON THE LEVEL"

Tank / Sump Level Monitoring

SENTINEL™ 24/7

The **Sentinel 247™** is a Cellular Tank or Sump Level Monitoring system that delivers Reliable Daily Measurements that are both Scheduled and Event Driven. Remote monitoring with the **Sentinel 247™** is exceptionally flexible, eliminating the hassles of network infrastructures and Internet service. Instead, the **Sentinel 247™** connects wirelessly to Local cellular networks and transmits Alarms, Inventory, Battery Status and GSM Signal Strength, all of which are available through the **Sentinel 247™** Cloud Based Website. The **Sentinel 247™** online provides you with important data readily at your fingertips on your Computer, Tablet or Smartphone.

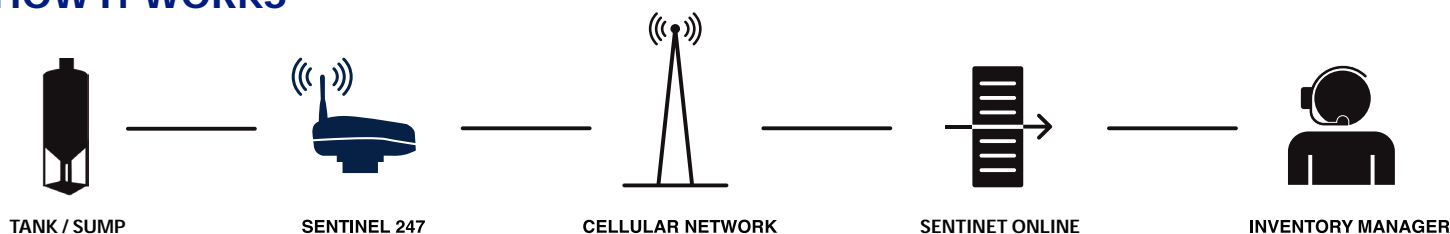
SPECIFICATION

Wireless Communication	GSM or Digital Wireless Radio
RF Approval	FCC part 15 approved
Frequency Bands	GSM 850/1900 MHz WLAN
Output Voltage	Nominally 24 VDC +/- 5%
Output Current	4 - 24mA
Enclosure	NEMA 4X, UL Approved
Classification (Intrinsically Safe Model)	Non-Volatile E2 PROM Memory
Lithim Battery	Replaceable lithium ion batteries (CR-123A)
Battery Voltage	6V
Expected Life	Up to 6000 Callouts

FEATURES & BENEFITS

- ✓ Battery Operated - No Programming - One Button Only
- ✓ Remote Monitoring through Cellular Networks
- ✓ E-mail Reporting - Alarms, Text E-mail
- ✓ 24/7 access to data through Cloud Based Sentinel 247™ Online
- ✓ Battery powered up to 5 years (3 calls/day)
- ✓ Variety of Trigger Points
- ✓ Mobile Ready Access
- ✓ Small Footprint
- ✓ Works with your Existing Equipment
- ✓ Low Monthly Cost
- ✓ Powerful - Long Range Antenna (Perfect For Remote Locations)
- ✓ Access Data Via PC, Laptop, Smartphone, Tablet
- ✓ Secure (password protected)
- ✓ No Hidden Costs
- ✓ Standard Batteries
- ✓ Can be Mounted Directly to Top of Tank - 2" NPT
- ✓ Eliminate Costly Emergency Fills or Pump-Outs

HOW IT WORKS



NO WIRES - BATTERY OPERATED

Actual Screen Shots of Sentinel 247TM Monitoring Software

Overview of Tanks Types of Liquids Current Status

Summary of Tanks in Service

Logged In as Demo IPC | My Profile | Logout

Administrative Contact: Greg Reid | Currently Selected Organization:

Home | Tanks | Users | Organizations | Locations

Global Search MIN Number

ACME Test :: ACME Products

Summary		Alarms		Reports	
Tank Summary		Alarm Free :	0	No Recent Update :	2
Active Tanks :	3	High Alarm :	0	Low Battery :	2
Maintenance Tanks :	2	Low Alarm :	0	Expected Call :	0
Inactive Tanks :	0	Critical High Alarm :	0		
Total Tanks :	3	Critical Low Alarm :	1		

Alarms

New! Tank Data 3.5 - Maps and Tank Photos - count = 3

See 50 results per page Include Child Organizations Previous Next

Map	Status	Organization	Location Name	Tank Name	Product	Inventory Time	Inventory (Gross)	Volume (%)
Map	- NRU - LB	ACME Products	Production Inc.	Glycol Tank (Deact)	Glycol acid	5/7/2011 7:47:24 PM	4206.0	1,27
Map	- NRU - LB	ACME Products	Production Inc.	Resins Process Tank (Deact)	Resins polyester	6/6/2011 7:45:00 PM	29955.3	5
Map	- CLA - ID	ACME Products	Acme Products Stock	Tank 1018005967	DEF	6/4/2012 7:40:27 AM	11.1	

Page 1 of 1 Go To Page: Go



Everything At your Finger Tips

Current Detailed Status of Each Tank in Service

Tank Status

Inventory Time: 4/10/2012 12:32:09 PM

Primary Location Contact: Not Assigned

Alarm Status: OK

Comm Status: OK

Maintenance Status: OK

Sensor Status: OK

Level: 63.7 in

Inventory: 214.3 gal

Tank Type: Standard Horizontal Cylindrical Tank

Tank Height: 68.0 in

Tank Number: 1

Region: -----

Route: -----

User Defined: -----

User Defined (B): -----

Key Note: Example

Schedule Route by Region or Territory
+
Type of Chemical Ex (HCL)
+
Level i.e. Tanks - below 25% Capacity

Tank Level

Graphical Level of Tank or GMP

214 gal 97%

Temperature

61° °F

Easy to Locate Remote Tanks

Signal Strength

Quick View

Battery Level

57%

Google® MAP Location

NO WIRES - BATTERY OPERATED

Actual Screen Shots of Sentinel 247™ Monitoring Software

SENTINEL™
sensing & telemetry solutions 24/7

Logged In as Demo IPC | My Profile | Logout
Administrative Contact: Greg Reid |
Currently Selected Organization:

Home | Tanks | Users | Organizations | Locations
Global Search MIN Number

ACME Products

Details | Map | Permissions | History | Usage | Setup | **Alarms** | Service

Tank Details

Tank Name: Glycol Tank (Deact) Cellular ID: 1010125466 Location: Production Inc.
Organization: ACME Products Serial Number: 720203990 Address: 5300 Cureton Ferry Rd., Durham, NC - 99999
Number: 1 Product/SGU: Glycol acid - 1.09000

Alarm Setup

Tank Capacity/Limits: 330.0 gal
Low Alarm Level: 50 % 165.0 gal High Alarm Level: 100 % 330.0 gal Short Fill/Drain Detect Volume: 100.0 gal
Critical Low Alarm Level: 10 % 33.0 gal Critical High Alarm Level: 100 % 330.0 gal Fill/Drain Detect Volume: 200.0 gal
Low Temp Alarm: -5 °F High Temp Alarm: 130 °F Volume Change: 35 % 115.5 gal
Alarm on Expected Call: ☐ Expected Call Minutes: 0

Level Alarm Save Alarm Levels

Device Alarm Setup

☐ Call on Low Alarm ☐ Call on High Alarm Call out Alarm Interval: 120 minutes
☐ Call on Critical Low Alarm ☐ Call on Critical High Alarm Data Logging on % change: 0.0 %
☒ Call out on % change 3.0 % **Possible Tank Leak** Set Telemetry Data Resolution (default is 3% inventory change every 30 minutes)
☐ Call on Fill/Drain Detect at Volume: 0.0 gal **Competitor getting the business**
Fill/Drain Hysteresis Volume: 0.0 gal Cancel Save Device Trigger

Email Alert Definitions

☐ Include Inactive Email Alert Definitions

Alarm Description	User	Type	Critical Low Alarm	Low Alarm	High Alarm	Critical High Alarm	Low Temp. Alarm	High Temp. Alarm	Low Battery Alarm	Fill Detect	Short Fill Detect	Expected Call	Volume Delta	Email Notification	Active
G. Sokoloski	Tank	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Normal	<input checked="" type="checkbox"/>
E. Grabowski	Tank	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Normal	<input checked="" type="checkbox"/>

Add Alarms with Simple Drop Down Menu. Save All

SENTINEL™
sensing & telemetry solutions 24/7

Logged In as Demo IPC | My Profile | Logout
Administrative Contact: Greg Reid |
Currently Selected Organization:

Home | Tanks | Users | Organizations | Locations
Global Search MIN Number

ACME Products

Details | Map | Permissions | **History** | Usage | Diagnostics | Setup | Alarms | Service

Tank Details

Tank Name: Cellular ID: 350700403800 Location:
Organization: Serial Number: 720330813 Address:
Number: 1 Product/SGU: Helium - 1.00000

Tank History

Date Range
From: 4/23/2012 To: 5/23/2012 Submit Date Range

Volume (gal)

Time Reported

History

Export Data to Excel

Add Inventory Record

Stick Measurement Level: in Date: 5/23/2012 Time: AM PM
Add Inventory Record

Results per page: 100 Export to Excel

Status	Inventory Time	Level	Inventory	%	Temperature	RSSI	Min #	RTU ID	Source	Active
OK	5/23/2012 3:34:01 PM (W)	510.2 in	5101.8 gal	76.49	68.00 °F	9	350			
OK	5/23/2012 2:34:53 PM (W)	519.6 in	5196.5 gal	79.95	68.00 °F	9	350			
OK	5/23/2012 1:34:01 PM (W)	537.6 in	5375.6 gal	82.70	68.00 °F	10	350			

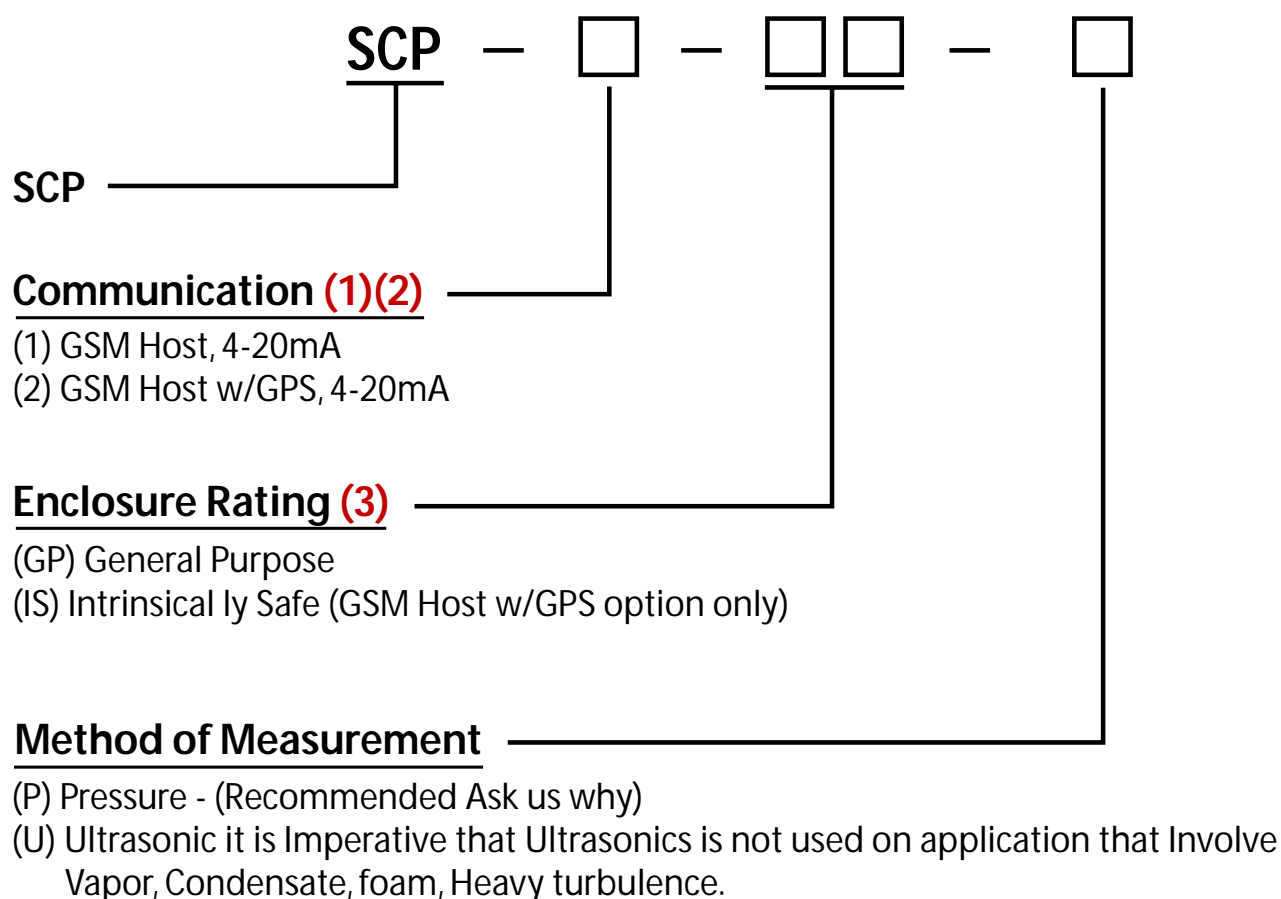
User Configurable Data Range

NO WIRES - BATTERY OPERATED

Ordering Information

MODEL NUMBER BUILDER

Use the diagram below, working from left to right to construct your Model Number. Simply match the category number to the corresponding box number.



Ordering Notes:

- (1) Select the best configuration based on your requirements
- (2) Monthly service fees will apply. Limit 3 calls per day. *Additional monthly fee may apply.
- (3) The Intrinsically safe enclosure rating can only be used with the GSM Host w/GPS option.

"ALWAYS ON THE LEVEL"