

# Savi IoT™

The Savi IoT (Interrogator or Transponder) Sensor is essential for tracking and protecting high value assets throughout global military and civilian supply chains. For maximum real-time supply chain agility, cellular transmission capabilities complement existing Active RFID support. This high-performance, long-life sensor is integrated with Savi Visibility™ software to enable a comprehensive view of stationary or in-transit assets.

## ACTIVE RFID · CELLULAR · FLEXIBLE

### Agile Design

Today's warfighters may operate where no RFID infrastructure exists. Our new line of IoT sensors acts as an Active RFID (aRFID) tag, and also interrogates other aRFID tags, transmitting those reads over a cellular network as soon as a signal is available. Savi IoT sensors are backward compatible with current aRFID technology.

Our hybrid IoT sensor wirelessly interrogates all aRFID tags in range—up to 50 aRFID tags at a time—and periodically rescans for new aRFID tags in range. IoT sensors can also be used as anti-tamper transponders.

Savi employs a holistic, synergistic approach to its security solutions—hardware and software are designed and optimized to work in concert. IoT sensors are programmed to meet specific use cases while seamlessly integrating into our proprietary in-transit visibility software, Savi Visibility.

### Configurable Alerts

Our IoT sensors continuously monitor the shipment environment and instantaneously send alerts to Savi Visibility when exceptions occur—whether tamper, location, time, geozone, stoppage or any other event combinations. Each hybrid sensor is programmed to send updates at varying intervals to optimize battery life. All IoT sensors have a battery life of up to 90 days at one hour reporting intervals.

### Flexibility of OTA Updates

Customers enjoy the flexibility of Savi's over-the-air (OTA) sensor management capabilities. This functionality enables Savi to change configuration parameters and update firmware on demand. Configurations can be programmed by Savi before shipment or over-the-air once the sensor is in the field.



# Savi IoT Specifications

## MODEL NUMBER

STR-900-ISO Savi IoT

## PHYSICAL

LxWxD 88mm x 46mm x 168 mm

Standard Cable Length 300 mm

Weight 0.48 kg

## ENVIRONMENTAL

Temperature -30°C to +50°C, Operating  
-40°C to +70°C, Non-operating

Humidity 95% RH@ 50°C Non-condensing

Shock and Vibration U.S. Military Standards 202G and 81 OF, SAE J1455

Weatherproofing Designed to meet IP67 weatherproofing

## WIRELESS

Frequency 433 MHz, 850/900/1800/1900 MHz

Protocol Active RFID ISO 18000-7  
Quad-Band GPRS and Savi Proprietary Protocol 22- channel  
GPS with Cellular

## GPS/LOCATION

Location Technology 22 Tracking/66 Acquisition Channels; GPS L1 CIA code

Location Sensitivity Tracking: -165 dBm. Cold starts: -147 dBm

Time -To-First-Fix Cold starts: 30s (typ); hot starts: 1 s (typ); Warm starts: 28s (typ)

Location Accuracy Horizontal position: <2.5m

Location Triangulation Backup

## REGULATORY APPROVALS

Hazardous Substances RoHS Compliant

EMC/EMI SAE J1113;FCC-Part15B; Industry Canada

Global Certifications FCC, CE, I-SFE XPI/17553/16.0757

## ELECTRICAL

Battery 8400 mAh Lithium Ion Rechargeable Battery

## Key Features

- Active RFID
- Internal cellular and GPS aRFID antennas
- Long Life : up to 90 days battery life at one hour reporting intervals
- 10,000 buffered message storage capacity
- Battery level LED indicator
- IP67 weatherproof encasement
- Intuitive security cable lock

## Certifications

- CE
- ISafe: [Ex ib] IIB Gb
- IA No. : S-XPI/16.0757 X
- RoHS
- UL
- FCC Part 15
- FCC ID: KL7ST-900CP

## ABOUT SAVI

Savi delivers live streaming facts and insights about the location, condition, and security of in-transit goods. Using big data analytics, Savi equips shippers, carriers, 3PLs, and governments to optimize supply chain logistics before, during and after transit, reducing costs and inventory while improving service. Savi is trusted to run the world's largest and most complex asset tracking and monitoring network serving the US DoD, Allied military and more than 1000 commercial companies around the globe.

For more information visit [savi.com](http://savi.com).



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