



## Specification Sheet

# Savi Container Security Tag (ST-675)



The Savi ST-675 is an active RFID container security tag with intrusion and environmental sensors. The ST-675's sensor arm detects the open/closed state of the shipping container door, and the intrusion light sensor monitors the amount of light entering the container. These intrusion sensors detect potential theft or tampering. The temperature, humidity and shock sensors monitor environmental conditions to prevent spoilage and damage to goods.

The ST-675 periodically records environmental status data to an event log in the tag's memory. If the collected data rises above or falls below the user-configured range, the tag sends a real-time alarm to an RFID reader. The alarm is escalated via a web application, cell phone or email notification, allowing it to be addressed immediately before spoilage or damage occurs.

The ST-675's unique C-clamp door-mount design places the sensitive RFID components inside the shipping container. Only the low profile, external antenna casing is on the outside of the container, which significantly reduces the risk of tag damage during the loading, unloading and transportation of shipping containers.

## Specifications

### Model Numbers

ST-675-030	Container security tag
ST-675-030-NSN	Container security tag with label

### Physical

Rear Case:	4.7 x 4.5 x 1.5 in. (12 x 11.4 x 3.8 cm)
Front Case:	4.6 x 3.2 x 0.5 in. (11.6 x 8.1 x 1.2 cm)
C-Clamp:	4.7 x 5.2 x 2 in. (12 x 13.3 x 5 cm)
Weight:	16 ounces (457 g)
Container:	ISO 668: 1995(E) Series 1 Freight Containers
Color:	Black

### Environmental

Temperature:	-32°C to +70°C Operating; -40°C to +85°C Storage
Humidity:	95% Non-Condensing
Vibration & Shock:	MIL-STD-810F
Weatherproofing:	IP64
Manufacturing:	RoHS Directive 2002/95/EC

### Wireless (UHF Transceiver)

Frequency:	433.92 MHz at 0.6 mW peak EIRP, FSK Modulated
Range:	400 ft. (122 m) operating read/write range (outdoors, non-obstructed)
Protocols:	ISO 18000-7, EchoPoint

### Wireless (LF Receiver)

Frequency:	123 kHz
Range:	Up to 12 ft. (3.6 m) from Savi SP-651-211 Long Range Signpost & Savi SP-652-211 Signpost Reader
Protocol:	EchoPoint

# Savi Container Security Tag (ST-675)



## Features:

- ISO 18000-7 compliant active RFID container security tag
- Sensors monitor security status and environmental conditions inside shipping container
- Unique C-clamp, door-mount design
- Supports innovative low frequency technology for more precise locating capabilities
- FCC, ETSI, HERO and RoHS certified

## Benefits of Savi's Low Frequency (LF) Technology

Savi products support LF technology, which allows users to locate assets with greater precision. Savi's LF solution does this by focusing the tag wake-up field so that tags are not read multiple times, thus conserving tag battery life. Savi's LF Signposts can capture assets passing through a chokepoint at speeds up to 60 mph (97 kph). Robust and scalable, Savi's LF solution tracks assets and items throughout the supply chain effectively and automatically.

## CONTACT US

To learn more about the full range of Savi's solutions, please email us at [info@savi.com](mailto:info@savi.com) or visit [www.savi.com](http://www.savi.com).

## Specifications (continued)

Power	
Battery Type:	3.6 V lithium, replaceable by user without tools
Battery Life:	Approximately 4 years at 2 collections per day
Digital	
Sensor Memory:	32 Kbytes on-board non-volatile memory
Database Memory:	128 Kbytes on-board non-volatile memory
Wired Interface:	USB 1.1, USB 2.0
Mounting	
C-Clamp:	Clamps easily onto shipping container door edge (frame) – C-Clamp to left door, sensor arm under right side for monitoring door closure status. Tag can be mounted anywhere on the edge of the left-hand container rectangular doorframe measuring 2 in. (50 mm) x 4 in. (100 mm).
Approvals	
Radio Type Approval:	FCC Part 15, ETSI, EN 300 220 (433.92 MHz)
EMC & Immunity:	ETSI, EN 301 489
Ordinance:	HERO Certified, ARDEC rating of 1 in. (2.5 cm)
Environmental Sensors	
Temperature:	Senses and samples temperature with adjustable sample period and adjustable alarm thresholds
Humidity:	Senses and samples humidity with adjustable sample period and adjustable alarm thresholds
Shock:	Senses and samples shock events with adjustable alarm thresholds
Tamper Sensors	
Door Sensor:	Senses whether door is opened or closed
Light Sensor:	Senses the light entering the shipping container above an adjustable threshold

## About Savi

Savi Technology provides organizations with operational analytics – the ability to collect and convert operational information into useful knowledge – from physical objects like supplies, equipment and cargo. The Savi Sensor Based Analytics Platform gives enterprises the ability to access, analyze and learn from new data in ways previously impossible, yielding streamlined operations, enhanced security and dramatically improved enterprise decision-making. Savi is headquartered in Alexandria, VA, with operations in Lexington, KY and around the world. Savi was named a 2013 Computerworld Honors Laureate for the economic improvements its technology has provided to several countries in Africa. Savi has more than 100 domestic and foreign issued patents covering a variety of technologies and is an active participant in several industry standards bodies including ISO 18000-7. For more information visit [www.savi.com](http://www.savi.com).