Savi Data-Rich Tag (ST-656)

The Savi ST-656 is an active RFID tag for shipping containers that enables shippers, carriers and logistics service providers to monitor their shipments in real time as they move through the global supply chain. The ST-656'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.

Available with 128 Kbytes of programmable memory, the ST-656 can hold a variety of data, from simple IDs linked to a server database, to detailed shipment manifests. The ST-656 is constructed to survive harsh environments, and to provide reliable data to RFID readers. The ST-656 supports 400 feet (122 m) of RFID communications range, and delivers real-time asset information to guide supply chain operations.

Specifications

Model Numbers	
ST-656-030	Data-rich tag with shipping container door mount
ST-656-030-NSN	Data-rich tag with shipping container door mount 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)
Container:	ISO 668: 1995(E) Series 1 Freight Containers

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, EchoAir

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

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Features:

- ISO 18000-7 compliant active RFID tag for tracking shipping containers
- Unique C-clamp door-mount design that greatly reduces the risk of damage to the tag
- 128 Kbytes of database memory enables tag to support multiple applications
- 400 ft. (122 m) of range for wake-up, collections and RF read/write
- Replaceable battery with typical five year life
- Supports innovative low frequency technology for more precise locating capabilities
- Supports USB for reading and writing
- FCC, HERO, RoHS (Directive 2002/95/EC) 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.

Specifications (continued)

Power	
Battery Type:	3.6 V lithium, replaceable by user without tools
Battery Life:	Approximately 5 years at 2 collections per day
Digital	
Database Memory:	On-board, non-volatile memory 128 Kbytes
Wired Interface:	USB 1.1, USB 2.0
Mounting	
C-Clamp:	Clamps easily onto shipping container door edge (frame) - C-Clamp to left door. Mount tag 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, EN 300 220 (433 MHz)
EMC & Immunity:	EN 301 489
Ordnance:	HERO Certified, ARDEC rating of 1 in. (2.5 cm)

CONTACT US

To learn more about the full range of Savi's solutions, please email us at info@savi.com or visit www.savi.com.

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.