

# Savi ST-616-031 Asset Tag



The Savi ST-616-031 is an active RFID asset tag designed for the robust demands of managing assets in both defense and commercial applications. The ST-616-031's small, ruggedized form factor is easy to mount on various asset types such as pallets, containers and rolling stock.

The ST-616-031's unique design allows this tag to be used with a smaller class of assets than other RFID tags. With larger-class assets, the versatile ST-616-031 offers flexible mounting options with a low profile that makes the tag less prone to damage.

The ST-616-031 incorporates efficient energy management technologies that significantly prolong battery life and minimize the cost and size of the tag. In congested RF environments where tags are polled repetitively, the ST-616-031's over-polling detection and protection algorithm extends battery life. The ST-616-031 also supports a low-power storage mode for when assets are not in use. The tag can be awakened when the assets are back in use.

## 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

## Specifications

Model Numbers	
ST-616-031	ISO 18000-7 compliant asset tag with non-replaceable battery
Physical	
Dimensions:	7.90 in. (20.1 cm) x .99 in. (2.5 cm) x 0.69 in. (1.8 cm)
Weight:	2.26 ounces (64 g)
Color:	Green
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:	300 ft. (100 m) operating read/write range (outdoors, non-obstructed)
Protocols (ST-616-031):	EchoPoint, ISO 18000-7
Wireless (LF Receiver)	
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

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.

## Features:

- ANSI 256 or ISO 18000-7 compliant active RFID asset tag for tracking various asset types
- 2 Kbytes of memory for recording asset configuration and maintenance data
- Rugged design and low-profile form factor
- State-of-the-art power management technologies to preserve tag battery life
- Compatible with the DoD RF-ITV Network and Allied Military active RFID networks
- FCC, ETSI, HERO and RoHS certified

## Specifications (continued)

Power	
Battery Type:	Non-replaceable lithium battery
Battery Life:	3 years at a maximum of 18 cycles or reads per day at 20 degrees C, using Savi's recommended reader settings. Normal tag usage is typically 2 reads per day; Over-polling protection algorithm and low-power storage mode to extend battery life
Digital	
Database Memory:	2 Kbytes on-board non-volatile memory
Approvals	
Radio Type Approval:	FCC Part 15, ETSI, EN 300 220 (433.92 MHz)
EMC & Immunity:	ETSI, 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](mailto:info@savi.com) or visit [www.savi.com](http://www.savi.com).

## About Savi

Savi Technology provides enterprises and organizations with unique and critical insight through the Savi Sensor Based Analytics Platform. The 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 recently 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).