



# Savi Mobile Reader SMR-650P

Built on Savi's EchoPoint™ technology, the Savi Mobile Reader takes real-time data collection to a new level.

The Savi Mobile Reader is an integrated mobile, low profile, lightweight, battery operated interrogator/reader module that is used in conjunction with the Symbol Personal Data Terminal (PDT) for the purpose of commissioning, identifying and configuring Savi RFID tags.

### Features

- Mobile integrated PDT with RFID reader for commissioning, reading, and configuring Savi and Savi Network compatible RFID tags.
- Compatible with all Savi RFID tags, including Savi ST-41x series tags and Savi EchoPoint Series 600 tags.
- Short-range, low frequency transmitter for commissioning of EchoPoint RFID tags.
- Long-range, two-way UHF receiver/transmitter for tag wakeup, read, and write.
- Battery operated PDT and RFID reader.
- Handheld carrying case (model HCC-650-01) mounts the Savi RFID mobile reader to the Symbol 8100 and 8146 Personal Data Terminal.
- Kit configuration available including the RFID reader, Symbol PDT, Carrying Case, and Savi Mobile Manager software bundled in various options.

### EchoPoint Technology

Savi's EchoPoint technology is a new, innovative and patent pending technology that leverages the best features from several traditional RFID technologies into a single, highly cost-effective solution. Using two operating frequencies, EchoPoint combines long-range communication with precise spot-level locating. Together with worldwide acceptance and low infrastructure costs, EchoPoint is uniquely suited to the demands of today's global supply chains.

### Specifications for Savi Mobile Reader SMR-650P

Physical	
Dimensions:	Approx. 6.4 cm. (2.5 in.) x 8.9 cm. (3.5 in.) 2.5 cm x (1 in.)
Weight:	4.8 ounces (136 grams)

Environmental	
Temperature:	-20 to + 50 °C when operating from internal battery
Humidity:	5% to 95% non-condensing at +50 °C (122 °F)
Shock:	Mil-Std-810E; Method 516.4, Category 10
Vibration:	Mil-Std-810E; Method 514.4, Category 10
Enclosure:	Sealed to IP42

RF Receiver/Transmitter	
UHF Frequency:	433.92 MHz
Range:	Up to 200 Feet typical (61 meters) Line of Sight
Modulation:	FSK, deviation +/- 35KHz
Data Rate:	27.8 kbps, 50% duty cycle
Air Protocol:	EchoPoint Air Protocol Enhanced Batch Collection System (EBCS)

Network	
Interface:	Interface back to network requires handheld to be enabled with wireless or wired docking station
Protocol:	UDAP (Universal Data Appliance Protocol) used to communicate with Savi Site Manager



### Low Frequency Transmitter for Tag Commissioning

Frequency:	123 KHz
Range:	Up to 4 Feet (1.22 meters)
Modulation:	ASK On-Off Keying
Data Rate:	Avg. 1.6 kbps, 50% duty cycle
Data Coding:	Pulse Code Modulation

Tag Compatibility:	All Savi RFID tags
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### Power

AC Source for RFID Reader:	AC wall adapter for charging battery 6 ft cable, Input: 110 / 220 VAC, Output: 5V +/-10% regulated, 300 mA
Internal Battery for RFID Reader:	Rechargeable Li-Ion battery (3.7V @ 420mAh up to approx. 500 recharging cycles @ 80% or more of full battery capacity). Capacity sufficient for 3 to 4 days of continuous operation depending on usage assumption. Battery is non-replaceable by the user.

### Approval

Type:	FCC Part 15, ETSI, EN 300 220-1 and EN 300 330
AC Adapter:	UL 1950, CE EN 60950

PDT Mounting:	Handheld carrying case (model HCC-650-01) mounts the Savi RFID mobile reader to the Symbol 8100 and 8146.
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### Digital

Memory:	32K bytes non-volatile for tag data
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Software Requirements:	Savi Mobile Manager software required.
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### ABOUT SAVI

Savi is the proven leader in global supply chain security and real-time asset management with over 14 years of logistics infrastructure experience. The company's broad customer base includes the U.S. Department of Defense as well as numerous international ports, terminal operators, carriers, asset owners and third party logistics providers. Founded in 1989, Savi Technology is headquartered in Sunnyvale, California and offices in Johannesburg, London, Singapore, Taipei, and Washington D.C..

### Interested in Savi's EchoPoint Technology?

Let us show you how Savi's EchoPoint Technology can work for your company. In the United States, call toll-free 800-428-0554, international customers dial 408-743-8000. Contact Savi Asia at 65-2411191 and Savi EMEA at +44 1483 243617 (England), +27 11 469-3144 (S. Africa). Visit [www.savi.com](http://www.savi.com) or email us at [sales@savi.com](mailto:sales@savi.com).

