



# **Snap-on UHF RFID Reader**

# 1101 UHF RFID reader for the Motorola MC70/75/75A

# **High Performance Upgrade**

The 1101 UHF RFID Reader provides a UHF RFID upgrade path for Motorola MC70, MC75 and MC75A terminals. It snaps on to the bottom of the host terminal and uses the serial port for all data communications.

The reader supports reading and writing of EPC Class 1 Generation 2 (ISO 18000-6C) transponders, and has been designed for operation in European (ETSI EN 302 208) and US (FCC Part 15) regulatory environments, including Dense Reader Mode Capability.

The rugged design of the UHF reader means that it can withstand multiple drops of up to 1.3m (4.26ft) to concrete.

## **Independent Power**

A rechargeable battery is included in the reader to avoid reducing the run time of the host terminal. The battery is normally charged in the reader, but can be swapped out in applications requiring continuous operation.

### **Simultaneous Charging**

The combined DC input and USB connector at the base of the unit socket enable simultaneous charging of both the UHF Reader battery and the MC70/75/75A battery, as well as ActiveSync with the host device.

An extensive software development kit (SDK) is available for development of customer applications.

# **Features:**

#### High Performance antenna

Integrated circularly polarised antenna facing out from rear of reader (and host terminal)

#### Simplicity

Reader snaps on to host terminal to provide "one piece, one charge" reader solution. Optional locking screws make the attachment semi-permanent.

#### Long run time

10 hours on a single charge performing 3000 inventory cycles every hour

#### Easy integration

SmartWedge software for Windows Mobile devices enables straightforward integration with form based applications, supporting most of the commonly used Control characters.

# TSL 1101 Specifications

#### **Physical Characteristics**

Physical Characteris	STICS
Dimensions (max):	87mm × 135mm × 42mm (3.43"x5.31"x1.65")
Weight:	295g (10.4 oz)
Enclosure material:	GE Lexan Polycarbonate
Colour:	Grey
Material finish:	Sparked surface
Attachment to host terminal:	Snap-on action with locking screws
UHF RFID Reader	
Frequency:	865 – 868 MHz (ETSI version) 902 – 928 MHz (FCC version)
RF Power:	10 - 800 mW (10dBm to 29dBm) (software controlled)
Antenna:	Circularly Polarised radiating from the back plane of the reader and host terminal.
Read Distance:	Up to 2m (6 feet) - (tag dependent)
Environmental	
Operating Temp.:	-20°C to +60°C (-4°F to 140°F)
Storage Temp.:	-40°C to +60°C (-40°F to 140°F)
Humidity:	Up to 90% Relative humidity Non Condensing
Drop Spec:	1.3m (4.26ft) to concrete, 6 drops per 6 sides over operating temperature
Sealing:	Conformal coated electronics
Electrostatic Discharge (ESD):	+/-15kV air discharge, +/-8kV direct discharge
Construction:	RoHS compliant
Regulatory	
Electrical Safety:	IEC 60950-1:2005 UL60950 Second Edition
EMI/RFI:	EN 301 489-3 V1.4.1 EN 302 208 V1.3.1 FCC Rule Part 15.247 FCC Rule 15, Subpart B, Class B limits Industry Canada – Certified to Specification RSS-210
Part Numbers	
1101-01-SO-UHE	ETSI variant

### About TSL

TSL designs and manufactures both standard and custom embedded, snap on and standalone peripherals for handheld computer terminals. Embedded technologies include:

	RFID - Low Frequency, High Frequency & UHF
	Bluetooth
	Contact Smartcard
	Fingerprint Biometrics
	1D and 2D Barcode Scanning
	Magnetic Card Readers
	OCR-B and ePassport
0	design, TSL develops products from concept thro Blue Chip companies around the world. Using the

Utilizing class lea to high volume n ough above technologies TSL develops innovative products in a timely and cost effective manner for a broad range of handheld devices.

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1101-01-SO-UHF ETSI variant 1101-02-SO-UHF FCC variant

#### Warranty

The TSL 1101 reader is warranted against defects in workmanship and materials for a period of one year (12 months) from date of shipment, provided the product remains unmodified and is operated under normal and proper conditions.