

# 1059 MULTI-ISO HF RFID READER FOR MOTOROLA MC70/75/75A SNAP-ON HF RFID READER











#### **High Frequency upgrade**

This snap-on accessory provides the Motorola™ MC70/75/75A terminal with High Frequency (HF) RFID functionality. The reader attaches as a snap-on to the Motorola terminal and houses both the RFID reader and the antenna. Power for the reader is obtained from the host terminal.

The HF RFID reader provides the ability to read and write to a wide variety of transponders at 13.56 MHz including ISO 15693, ICODE (I & II) and the complete Mifare family of ISO14443 (A&B). Flash upgradeability of the RFID reader firmware provides future proofing of the reader. The data output from the RFID reader may be simply incorporated into a Pocket PC application using the Software Development Kit (SDK).

## **Applications**

Applications include: e-Payment, e-Toll Road Pricing, Authentication, e-Ticketing for Events & Public Transport, Logistics & Supply Chain Management. The Reader is available individually or as an Explorer kit containing the reader, sample RFID tags and a Software Development Kit (which includes a demonstration application, the source code for that application and full reader documentation)

#### **Features:**

# Multi ISO RFID reading & writing

Reads and writes to High frequency industry standard ISO 15693 smart labels including Texas Instruments Tag-it™ and Philips ICODE™ II ISO15693 at 13.56 MHz

#### SDK

Software development kit (SDK) available for development of custom applications

#### Compatibility

The reader remains compatible with existing MC70/75/75A accessories such as the single slot cradle and car charger.

#### Connectivity

USB and MC70/75/75A charge connections are brought through to the base of the HF RFID reader to allow charging and ActiveSync over USB with the Reader attached

#### **Easy attachment**

Customer installable assembly - easily removed from handheld

# **SPECIFICATIONS**

## **Physical Characteristics**

Dimensions:	90×82×32mm (3.54"x3.23"x1.26")
Weight:	95g (3.35 oz)
Enclosure material:	Polycarbonate
Colour:	Grey
Material finish:	Sparked surface
Mechanical attachment:	Snap-on action with optional locking screws
Docking:	Attachment maintains dockability with Motorola docking cradle for charging and ActiveSync

### **HF RFID Reader**

Frequency:	13.56MHz	
Supported RFID Standards:	ISO14443A, ISO14443 18000-3, ICODE	BB, ISO 15693, ISO
Supported Tag-ICs:	Tag-it HF-I Tag-it HF-I Light S Philips ICODE SL2 Infineon ISO15693 MIFARE® Standard MIFARE® 4k MIFARE® Pro MIFARE® DESFIRE MIFARE® SmartMX SLE 55Rxx SRF55VxxP +S SLE 66CL160S SLE 66CLX320P SR176	SRIX4K LRI 12 LRI 64 LRI 512 EM4135 KSW Temp Sense Sharp S ASK GTML ASK GTML2ISO TOSMART P064 Jewel Tag (IRT0302B11 KSW) ISO14443A Tags ISO15693 Tags
RF Transmission Speed:	Up to 848 kBit/s	
Read Distance:	Up to 8cm (3") using Is card format transpond	

## **SAM** support

SAM clock:	3.39MHz
SAM VCC:	5V
SAM type:	Form factor compatible with GSM SIM footprint

### **Current consumption**

Current Consumption:	< 150 mA during RFID read
	< 30mA in standby mode
	0mA in shutdown mode

#### **User indication**

Flash indicating activity (function may also be customised)
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### **Connection Interfaces**

Physical interface:	USB and power in to charge MC70/75/75A
Reader power supply:	Powered from host terminal
ActiveSync:	via USB

### **Environmental**

Operating Temp.:	-10°C to +50°C (14°F to 122°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; 1.5m (5ft) to concrete, 2 drops per 6 sides at ambient temperature 23°C (73°F)
Sealing:	Internal components conformal coated
Electrostatic Discharge (ESD):	+/-15kV air discharge, +/-8kV direct discharge
Construction:	RoHS compliant

## Regulatory

Electrical Safety:	Europe - EN60950-1 USA - UL60950
EMI/RFI:	EN 300 330, EN 301 489, CE marked USA - FCC Part 15

#### **Notes**

All PCBs are conformally coated

## **PART NUMBERS**

#### **RFID Reader Options**

1059-01-SO-MC75-RFID

1059 Multi-ISO HF RFID Reader for Motorola MC70/75/75A

## **WARRANTY**

The TSL 1059 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.

## **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<sup>®</sup> wireless technology
- Contact Smartcard
- Fingerprint Biometrics
- 1D and 2D Barcode Scanning
- Magnetic Card Readers
- OCR-B and ePassport

Utilizing class leading Industrial design, TSL develops products from concept through to high volume manufacture for Blue Chip companies around the world. Using the above technologies TSL develops innovative products in a timely and cost effective manner for a broad range of handheld devices.

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