



# 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"×3.23"×1.26")
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, ISO14443B, ISO 15693, ISO 18000-3, ICODE																														
Supported Tag-ICs :	<table border="0"><tr><td>Tag-it HF-I</td><td>SRIX4K</td></tr><tr><td>Tag-it HF-I Light S</td><td>LRI 12</td></tr><tr><td>Philips ICODE SL2</td><td>LRI 64</td></tr><tr><td>Infineon ISO15693</td><td>LRI 512</td></tr><tr><td>MIFARE® Standard</td><td>EM4135</td></tr><tr><td>MIFARE® 4k</td><td>KSW Temp Sense</td></tr><tr><td>MIFARE® Pro</td><td>Sharp S</td></tr><tr><td>MIFARE® Ultralight</td><td>ASK GTML</td></tr><tr><td>MIFARE® DESFIRE</td><td>ASK GTML2ISO</td></tr><tr><td>MIFARE® SmartMX</td><td>TOSMART P064</td></tr><tr><td>SLE 55Rxx</td><td>Jewel Tag</td></tr><tr><td>SRF55VxxP +S</td><td>(IRT0302B11 KSW)</td></tr><tr><td>SLE 66CL160S</td><td>ISO14443A Tags</td></tr><tr><td>SLE 66CLX320P</td><td>ISO14443B Tags</td></tr><tr><td>SR176</td><td>ISO15693 Tags</td></tr></table>	Tag-it HF-I	SRIX4K	Tag-it HF-I Light S	LRI 12	Philips ICODE SL2	LRI 64	Infineon ISO15693	LRI 512	MIFARE® Standard	EM4135	MIFARE® 4k	KSW Temp Sense	MIFARE® Pro	Sharp S	MIFARE® Ultralight	ASK GTML	MIFARE® DESFIRE	ASK GTML2ISO	MIFARE® SmartMX	TOSMART P064	SLE 55Rxx	Jewel Tag	SRF55VxxP +S	(IRT0302B11 KSW)	SLE 66CL160S	ISO14443A Tags	SLE 66CLX320P	ISO14443B Tags	SR176	ISO15693 Tags
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SR176	ISO15693 Tags																														
RF Transmission Speed:	Up to 848 kBit/s																														
Read Distance:	Up to 8cm (3") using ISO7810 size credit card format transponders.																														

## 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

Red, Green LEDs:	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

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1059-01-SO-MC75-RFID	1059 Multi-ISO HF RFID Reader for Motorola MC70/75/75A
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# WARRANTY

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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.

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# ABOUT

## ABOUT TSL®



Technology Solutions UK Ltd (TSL®), part of HID Global, is a leading manufacturer of high performance mobile RFID readers used to identify and track products, assets, data or personnel.

For over two decades, TSL® has delivered innovative data capture solutions to Fortune 500 companies around the world using a global network of distributors and system integrators. Specialist in-house teams design all aspects of the finished products and software ecosystems, including electronics, firmware, application development tools, RF design and injection mould tooling.

TSL® is an ISO 9001:2015 certified company.



ISO 9001: 2015

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## ABOUT HID GLOBAL



**HID Global powers the trusted identities of the world's people, places and things.** We make it possible for people to transact safely, work productively and travel freely. Our trusted identity solutions give **people** convenient access to physical and digital **places** and connect **things** that can be identified, verified and tracked digitally. Millions of people around the world use HID products and services to navigate their everyday lives, and billions of things are connected through HID technology. We work with governments, educational institutions, hospitals, financial institutions, industrial businesses and some of the most innovative companies on the planet. Headquartered in Austin, Texas, HID Global has over 4,000 employees worldwide and operates international offices that support more than 100 countries. HID Global is an ASSA ABLOY Group brand.

For more information, visit [www.hidglobal.com](http://www.hidglobal.com).

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