TECHNOLOGY SOLUTIONS UK LTD

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

MOTOROLA SOLUTIONS Validated

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, ISO14443B, ISO 15693, ISO 18000-3, ICODE	
Supported Tag-ICs :	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
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)

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*® 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.

CONTACT

Address:	Technology Solutions (UK) Limited, Suite A, Loughborough Technology Centre, Epinal Way, Loughborough, Leicestershire, LE11 3GE. United Kingdom.
Telephone:	+44 (0)1509 238248
Fax:	+44 (0)1509 220020
Email:	enquiries@tsl.uk.com
Website:	www.tsl.uk.com

ISO 9001: 2008