Multi-ISO HF RFID reader for the Motorola MC55/65 Terminal

+ Features and benefits:

- ✓ Mounts on the base of the MC55/65 terminal

- ✓ Motorola MC55/65 retains full bar code functionality and wireless LAN

- ✓ RFID reader is powered from the host terminal

- ✓ Multi ISO RFID reading and writing at 13.56 MHz

- ✓ High frequency (HF) industry standard ISO 15693 smart labels including Texas Instruments Tag-it™ and Philips ICODE™ II ISO15693 – 13.56 MHz

- ✓ Complete Mifare™ family of ISO14443 transponders

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

- ✓ Integrated SAM interface

- ✓ Customer installable assembly - easily removed from handheld

- ✓ Compatible with existing Motorola single slot desktop docking/charging cradle. USB and MC55/65 charge connections are brought through to the base of the HF RFID reader to allow charging and ActiveSync over USB with the Reader attached.

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+ The reader provides the Motorola™ MC55/65 with High Frequency (HF) RFID functionality. The HF RFID 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 MC55/65. 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).

+ The Reader is available as an Explorer kit which contains the reader, sample RFID tags, a Software Development Kit (which includes a demonstration application, the source code for that application and full reader documentation)

+ Applications include: e-Payment, e-Toll Road Pricing, Authentication, e-Ticketing for Events & Public Transport, Logistics & Supply Chain Management.

Performance Characteristics	
RF Transmit Frequency	13.56MHz
Supported RFID Standards	ISO14443A, ISO14443B, ISO 15693, ISO 18000-3, ICODE
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® Ultralight
	✓ 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
	✓ ISO14443B Tags
	✓ ISO15693 Tags

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Reading distance	Up to 8cm (3") using ISO7810 size credit card format transponders.
RF Transmission Speed	Up to 848 kBit/s

SAM support

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

Current consumption

Current Consumption	< 130 mA during RFID read
	< 65mA in idle mode
	< 35mA in standby mode

User indication

Red, Green LEDs	Flash indicating activity (function may also be customised)

Connection Interfaces

Physical interface	USB and power in to charge MC55
Reader power supply	Powered from host terminal
ActiveSync	via USB

Physical Characteristics

Dimensions	85×100×30mm (3.35"x3.93"x1.18")
Weight	100g (3.35 oz)
Enclosure material	Polycarbonate
Colour	Grey
Material finish	Sparked surface
Mechanical attachment	Snap-on action
Docking	Attachment maintains dockability with Motorola docking cradle for charging and ActiveSync

Environmental

Operating Temperature	-10°C to +50°C (14°F to 122°F)
Storage Temperature	-40°C to +70°C (-40°F to 140°F)
Tumble	250 0.5m tumbles (500 drops)
Drop specification	1.2m (4ft) to concrete

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Sealing	IP54
Electrostatic discharge	+/-15kV air discharge, +/-8kV direct discharge
Construction	RoHS compliant

Regulatory – in progress

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

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+ 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 and UHF
- Bluetooth
- GPRS/GSM
- IrDA
- Contact Smartcard
- Fingerprint Biometrics
- 1D and 2D Barcode Scanning
- GPS
- 802.11 Wi-Fi
- 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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Specification v1.7 – 16th September 2011

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