

Multi-ISO HF RFID reader for Motorola MC70/75/75A Terminal

+ *Features and benefits:*

- ✓ Mounts on the base of the MC70/75/75A terminal
- ✓ Motorola terminal retains full laser 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 but with the option of locking screws where a more permanent attachment is required.
- ✓ Compatible with existing Motorola single slot desktop docking/charging cradle. 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.



PART NO.
1059-01-SO-MC75-RFID

- + The reader provides the Motorola™ MC70/75/75A 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 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).
- + 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 : | <ul style="list-style-type: none"> ✓ 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

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

Current consumption

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

User indication

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

Connection Interfaces

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

Physical Characteristics

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|-----------------------|---|
| 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 |

Environmental

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|-----------------------|---|
| Operating Temperature | -10°C to +50°C (14°F to 122°F) |
| Storage Temperature | -40°C to +60°C (-40°F to 140°F) |
| Humidity | Up to 90% Relative humidity Non Condensing |
| Drop specification | 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) |

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|---------------------------------|--|
| Sealing | Internal components conformal coated |
| Electrostatic discharge | +/-15kV air discharge, +/-8kV direct discharge |
| Construction | RoHS compliant |
| Regulatory | |
| EMI/RFI | EN 300 330, EN 301 489, CE marked |
| | USA - FCC Part 15 |
| Electrical Safety | Europe - EN60950-1 |
| | USA - UL60950 |
| Notes | |
| All PCBs are conformally coated | |



+ 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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