



MULTI-PROTOCOLE 13.56 MHz RFID Reader

Multistandard RFID reader with embedded antenna

The RFID reader is a 13.56 MHz proximity reader, desktop base-station, compliant with the international standards **ISO14443** and **ISO15693**. It is built around innovative VLSI circuits, hence, enabling a strong output power out of the embedded antenna.

All the mandatory command sets of ISO14443 type A, type B, as well as the Sony Felica™ protocol are supported, as well as all the mandatory commands of the ISO15693.

Additionally, the optional, custom and proprietary commands of the RFID chips from EM Microelectronic Marin SA are implemented in the firmware, as well as the read-only function of the EM4006.



A SIM card slot is fitted in the reader. It allows the user to insert a ISO7816 SIM card. This SIM card, supplied by INGECOM, has the crypto algorithm of the EM4035, allowing the user to access the secret key of the RFID tag. The protocol controlled by the host, allows to change the content of the 4 secret keys of the EM4035, or to modify the tag memory segmentation.

The reader connects to the host with a regular USB interface. Specific connections are available upon request.

In order to protect the customer's investments, the firmware of the reader can be upgraded via the USB port. Registered customers can check for the latest release of the firmware on www.ingecom.ch.

A software demo application is available together with the full command set description.

Applications

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| ✓ Access control | ✓ Logistics | ✓ Anti-counterfeiting |
| ✓ Time attendance | ✓ Item management | ✓ Ticketing |
| ✓ Transportation | ✓ Fleet management | ✓ Vending |