Handy Card Viewer

A Flexible Contactless Card Terminal

The Handy Card Reader is a re-programmable contactless smart card terminal designed for portable use. It is designed to run applications that require a high level of security and is the ideal solution for purse and ticket inspections

It is housed in a lightweight ergonomically designed plastic case and runs off a rechargeable Li+ internal battery. During normal operation the device is capable of reading and verifying several thousand card before recharging. A full recharge cycle is achieved in less than 2 hours using an external mains charger.

An integral ISO7816 compatible SAM slot is provided to allow the secure storage of encryption keys.

The display is a full graphical LCD with electronic contrast adjustment allowing different fonts, sizes and icons to be displayed. To increase speed and to aid the operator, the reader has a green and a red high visibility LED

The unit is equipped with an integrated real time clock (RTC) which is independently powered by a Lithium coin cell.

The unit can be supplied with RS232 interconnectivity to allow information that has been stored during normal operation to be uploaded to a host system.

The rugged design allows the reader to be used in harsh environment. The unit is protected against dust and water spray and can withstand 1.2m drops onto solid surfaces. In addition the low weight of the unit coupled with the lanyard allows the unit to be used all day without discomfort.

Applications

Transport: the reader is used by ticket inspectors to check the validity of travel vouchers and stored travel rights.

Education: the reader is used to collect pupil attendance information. It is also used to verify the card-holders age.

Electronic purse: the reader is used to check the balance of the card purse and to display the transaction history.

GIS can supply either full customisation and build or a development platform for in-house development. Please contact GIS for further details.

Technical Specification

- 8-bit single chip microcontroller with variable clock speed
- 256Kbytes internal Flash memory (program memory)
- 8kbytes internal RAM
- 32Kbytes of external EEprom expandable up to 4Mbyte for transaction storage
- Real Time Clock with independent Lithium coin cell
  100 x 32 DOT matrix graphic LCD (4 lines of 16 characters)
- Membrane keyboard with 12 keys
- LED (green and red)
- Operates from single Li+ rechargeable cell
- Ergonomic case design with optional wrist-strap

Card Interface

- ISO14443-A or ISO14443-B (optional)
- Mifare Classic / Ultralight supported / T=CL (optional)
- Reading range up to 5cm
- SAM: ISO7816 ID0 - 3V or 5V

General Information

- 5V mains adapter/charger (supplied)
- Weight: 100gm
- Dimensions: 170 x 68 x 40(max) mm
- Enclosure is designed to comply with IP54 (IEC529).
- Operating Environment: 0 to +50°C ambient, 10 to 90% relative humidity (non-condensing)
- Transit and Storage: -10 to +60°C ambient, 5 to 95% relative humidity (non-condensing)

Standards and Approvals

- CE: EN61000-6-1:2001, EN61000-6-3:2001, EN60950:2000, EN300 330-1 V1.3.1, EN300 330-2 V1.1.1, EN301 489-3

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