



PRODUCT SPECIFICATION

RF Manager

The RF Manager is the central component of a radio frequency (RF) contactless smart-card system, controlling a network of RF readers and interfacing to site controllers. To achieve the easiest means of integrating an RF authorisation device to existing site networks, the RF Manager retains the independence of the readers and the site controllers. With the site controller RF server drivers provided, the RF Manager also offers a simplified application development process. This approach creates a flexible, cost-effective solution to providing the convenience and versatility of smart-card benefits to the retail or access control environment.

Features

- Controls a network of radio frequency contactless smart-card readers
- Associates a presentation of a smart-card (transponder) with the correct device
- Controls communication with site controllers to authorise devices
- Flash-programmable operating software can be remotely updated over a LONWORKSTM network
- Available as external stand-alone unit or OEM unit engineered for integration into site controller
- Uses published standard RFID System Message Set
- Supports networks of hybrid devices i.e. supports different RF Readers depending on the application

Benefits

The RF Manager supports a separate network for the RF readers to the existing site network, requiring no direct connection between the existing devices and the RF readers.

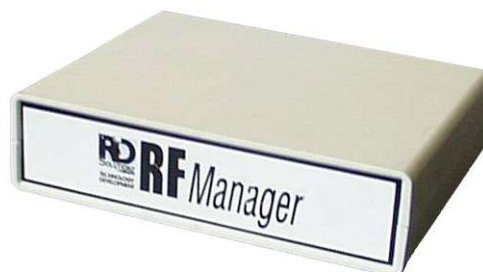
The device independent architecture creates advantages by permitting a wide range of retail devices to be RFID enabled, reduces engineering problems, simplifies reader installation, minimises software development and optimises the speed and costs of deployment.

The Rapid Smartcard Solutionz RFID network is open – allowing other vendors' readers or products to be utilised (including IFSF compliant dispensers).

RFID System Solution

The RF Manager forms part of a complete retail RFID system from Rapid Smartcard Solutionz, with a Mifare[®] Reader and customer response unit, customer smart-card encoding and fulfillment options also available. This system can be used to replace or coexist with existing magnetic stripe card reader, pin pad and receipt printer terminals.

The RF Manager, Mifare Reader, Encoding Station and Fulfillment system (including ODBC database) can be fully customised to regional banking, operating and network requirements. Rapid Smartcard Solutionz is able to provide development of an integrated RF turnkey solution, which can be implemented quickly with minimum disruption to an installed network.



Rapid Smartcard Solutionz RF Manager supplied as external stand-alone unit with connection to site controller.



TECHNICAL SPECIFICATIONS

Technical Data

Anticollision open standard IFSF protocol LONWORKS™ network architecture
Operating temperature (ambient) -20°C to +70°C
Dimensions 140 x 110 x 35 mm

Electrical

Power supply 12V
Source current 200mA
IEC 950 / EN 60 950 (Electrical Safety) compliance
EMC and ESD compliant – ETS 300 330 EN 55022

Components

Motorola MC 143150 micro-processor
3 x 8-bit pipelined 10Mhz processors
On-chip memory - 16 Kbytes RAM and 32 Kbytes ROM
11 programmable I/O pins
2xRS232 or RS485 Serial I/O ports
Network communications port
RS485 or 78kbps free-form topology network to IFSF standard
Service pin for remote identification and diagnostics
Unique 48-bit internal serial number stored on every device

RF Manager – Rapid Smartcard Solutionz Mifare® Reader Interface

Data communication rate 78Kbaud
IFSF style RFID protocol System Message Set

RF Manager – Site Controller Interface

Data communication rate 19.2Kbaud
RS232 or RS485 serial connection 8 bits, no parity, 1 stop bit
IFSF style RFID protocol System Message Set and serial wrapper

Models

Available in ABS enclosure as external unit or as an OEM unit (PCB) engineered for integration into a specific site controller as per customer specifications. All changes are subject to approval and price modification.

Other Rapid Smartcard Solutionz RFID Products & Software Applications

- The RF Manager is typically ordered with Rapid Smartcard Solutionz Mifare Readers. Refer to Rapid Smartcard Solutionz Mifare Reader Product Specification for further details.
- RF server drivers are available for application integration on site controllers with Windows 95/NT (Active-X) and OS/2.
- Diagnostics and demonstration applications are also available.

Ordering Information

Installation requirements depend on existing equipment. Specify all models of dispensers, site controllers, readers and point of service systems. A full range of RFID System products is available from Rapid Smartcard Solutionz. Please contact us to discuss your requirements.

Trademark

Mifare® is a registered trade name of Philips Semiconductors.

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