

S700 Exit Multi-technology Exit Reader



Key Features

- Multi-technology exit card reader designed for use as part of the CEM Systems AC2000 access control software range
- Contactless card presentation with the option to enable Personnel Identification Number (PIN) for two stage authentication
- Integral reading support for 13.56MHz smart card and 125 kHz proximity technology
- Communicates securely with the master reader
- Large graphical LCD which is used to display a number of predefined messages
- Soft-touch capacitive keypad
- Four analogue inputs to monitor door or alarm conditions
- Two changeover relay outputs to activate door strike or other equipment
- Remote programming facility to download updated firmware
- Easy to install
- Weather-proof casing: IP65-rated

The S700 Exit Card Reader is the next generation card reader, designed for use with AC2000 as part of an integrated online access control system. The exit reader is an extension to the S700e master reader.

Using a powerful 32-bit processor, the S700 Exit Reader gives full offline card verification and decision making at the point of entry, even when host communication is not available.

The IP65-rated polycarbonate enclosure houses the reader electronics and comes with a large 4x3 capacitive soft-touch keypad, graphical display screen and high intensity multi-colour LED light bar. The S700 reader has four analogue inputs which can be used to monitor door and alarm conditions for transmission to the host server. All four inputs are four state (tamper detect) capable. Two outputs are also fitted to control the activation of other equipment.

Host Communications

The S700 Exit Reader has an onboard RS485 connection allowing it to communicate directly with the master reader, removing the need for an intelligent control panel in the system design. The RS485 link is secured via AES encryption which ensures data transmission between the two readers cannot be deciphered.

Onboard Card Reading Technology

Designed to support 13.56 MHz smart card technology MIFARE® (CSN), DESFire® (CSN), CEM DESFire 3DES, CEM DESFire AES, iCLASS, iCLASS SE, PicoPass) and 125 kHz HID proximity technology. A single Wiegand or OSDP v2 interface is also provided to connect third party readers.

Reader Messages

The S700 Exit Reader has a large 2.4 inch graphical LCD which is used to display a number of predefined messages to cardholders depending on their privileges e.g. Wrong Zone, Lost/ Stolen Card, Card About to Expire, Access Granted and many more.

Easy to Install

The S700 Exit reader is designed to be extremely easy to install. The installer simply confirms the master reader settings on the server, provides power, connects to the master reader and the reader self-configures by means of downloading data from the host.

Proximity to Smart Card Migration

The S700 Exit Reader multi-tech version supports the simultaneous reading of traditional Proximity, MIFARE, MIFARE DESFire or iCLASS SE smart cards. This enables existing sites using proximity cards a seamless path to migrate to a more secure smart card solution with zero system downtime and with no effect on security. Once migrated smart cards can then be used for other applications such as cashless vending, biometric storage, logical access and much more. The S700 Exit Reader is the perfect migration tool, allowing a seamless, cost-effective transition to smart cards over time.

Graphical Feedback

The S700 Exit Reader has been designed to be as user friendly as possible and guide the user through intuitive graphical messages displayed via the reader LCD. The S700 screen provides graphical feedback and predefined messages and icons to cardholders depending on access privileges. Cardholders can quickly and efficiently identify why they may have not gained access, or if their card is expiring.

Configurable Door Modes

The S700 Exit Reader is a highly flexible and intelligent device. All configuration settings can be remotely set via the AC2000 software platform. Operational parameters such as door operating mode, lock open times, door held open times, are automatically downloaded to the reader over the IP network. Standard Operating Modes include, but are not limited to Door Access, Passenger (extended opening time), Equipment and Turnstile, Turnstile (pulse) mode enabling the S700 to become a versatile device meeting many different operational requirements.

High Security Environments

S700 readers can be used in conjunction with a CEM Systems Door Interface Unit (DIU) to provide the highest level of security at a door, moving power supply for the lock and input monitoring away from the reader to a secure location. The S700 can also be used in conjunction with the DIU230 (POE+) interface board, removing the requirement to have a fixed mains power source available at the door.

Examples of Graphical Messages



Encryption and Security Features

At the card reading level, the S700 can be configured to use highly secure encryption key authentication, such as 3DES or AES. This encryption takes place between the smart cards and S700 reader, providing secure transmission of data and enabling only cards with the correct keysets to be read. This also eliminates the possibility to copy or replay card details.

S700 Exit Reader with emerald

The S700 Exit Reader can work in conjunction with an emerald Intelligent Access Terminal providing a similar look, feel and user experience across bi-directional doors. An onboard RS-485 connection allows the S700 Exit Reader to communicate directly with the master emerald reader, removing the need for an intelligent control panel in the system design. The RS-485 link is secured via AES encryption which ensures data transmission between the two readers cannot be deciphered.

Specifications

Physical	
Size	144 x 100 x 49 mm (At widest point)
Weight	300 g
Housing	Flame retardant polycarbonate, with UV stabilisation, RoHS compliant
Colour	Black
Power Requirements	
Voltage	9-28 VDC
Current Consumption	2.4W Typical – 4.8W Peak
Environmental	
IP Rating	IP65
Temperature	-20° to +60° C (-4° to 140° F)
LED Indicator	Lightbar: High intensity multi-coloured
LCD Indicators	2.4 inch diagonal, 240 x RGB x 320 TFT full view, Brightness: 400 cd/m2 dimmable, Contrast ratio 400:1
Keypad	12 key, standard layout, (10 numeric keys, 2 function keys), capacitive, soft-touch
Functionality	
Inputs	Four analog inputs – voltage supplied, 4 state (tamper detect)
Outputs	Two relays fitted – Changeover volt free contacts
Rating	24 VDC @ 2 Amps max
Communication Interface	
To Master Reader	RS-485
Interfaces	Single Wiegand interface with a maximum cable length of 50M
Connection	Screw terminal: Relay & Power, Wiegand, Serial
Regulatory	
Agency Certifications	FCC Part 15, CE

Requirements

- AC2000 v7.1 and higher
- AC2000 Airport v7.1 and higher
- AC2000 Lite v7.1 and higher
- RTC Ethernet Reader Controller

Ordering Information

Product Code	Description
RDR/702/003	S700 Exit Card Reader with PIN (125kHz HID Prox and 13.56MHz iCLASS SE)
RDR/702/004	S700 Exit Card Reader with PIN (125kHz HID Prox and 13.56MHz MIFARE DESFire)
RDR/702/006	S700 Exit PicoPass Reader with PIN
RDR/702/007	S700 Exit Card Reader with PIN (13.56MHz MIFARE DESFire)
RDR/702/008	S700e Card Reader with PIN (13.56MHz iCLASS SE)

To order contact cem.sales@tycoint.com or call +44(0) 2890 456 767

Related Products



- AC2000
- AC2000 Airport
- AC2000 Lite



emerald



S700e

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