

New Product Announcement:

S700e Intelligent IP Reader

S700 Exit Reader

CEM Systems is pleased to announce the release of the **S700e** and companion **S700 Exit Reader** for use with the AC2000 suite of access control and security management systems. The S700e is the next generation fully integrated IP card reader and combined controller which can be deployed to control access to restricted areas or in special applications where card activation of machinery is required. The S700 Exit reader can be used in conjunction with an S700e master reader and provides the same look, feel and security on a bi-directional door.

Features at a Glance

- Intelligent card reader and combined controller all housed within the same unit, no requirement for an additional intelligent control panel in the system design
- 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
- Large reader database for off-line card verification and alarms
- Bright 2.4 inch graphical LCD display which is used to display a number of easy-to-read and simple to comprehend predefined messages
- Soft-touch capacitive keypad for dual authentication of card and associated PIN number
- Context sensitive function keys for selection and navigation
- Four analogue inputs to monitor door or alarm conditions
- Two changeover relay outputs to activate door strike or other equipment
- Weather-proof casing: IP65-rated and IK06 impact rating

S700 Features



Building on the success of the s610 intelligent reader range, CEM Systems is proud to announce the next generation of intelligent card readers, the S700e and S700 Exit reader.

The S700 is part of a range of advanced, intelligent readers for use with the AC2000 access control and security management system. The S700 controls access to restricted areas while providing users with an innovative and future proof access control solution.

The S700e is a powerful IP card reader and controller housed in a single device. The S700e features an on-board 10/100Mbps Ethernet connection and communicates directly with the AC2000 host server negating the requirement for an intelligent control panel in the system design.

A companion S700 Exit reader provides the same look, feel and security on a bi-directional door.

Equipped with keypad for two factor authentication, the S700 can provide multiple levels of verification, such as card only access or card + PIN authentication.

Card Reader and IP Controller in One



The S700e combines a multi-technology card reader with an integrated IP controller and on-board 10/100Mbps Ethernet connectivity with a large internal database for full off-line card validation.

Configurable Door Modes



The S700e is a highly flexible and intelligent device. Standard Operating Modes include, but are not limited to, Door Access, Passenger (extended opening time), Equipment and Turnstile, Multi-Swipe (Two man rule) and Turnstile (pulse) mode, enabling the S700e to become a versatile device meeting many different operational requirements.

Graphical Feedback



The S700 range has been designed to be as user friendly as possible and guide the user through intuitive graphical messages displayed via the reader LCD. The screen provides graphical feedback and predefined messages and icons to cardholders depending on access privileges. The S700 range also features a high intensity multi-colour LED light bar for visual feedback to the user.



Proximity to Smartcard Migration

The S700 multi-tech version supports the simultaneous reading of traditional Proximity, MIFARE, MIFARE DESFire, and 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 reader is the perfect migration tool, allowing a seamless, cost-effective transition to smart cards over time.

On-board Card Reading Technology

Designed to support 13.56 MHz smartcard 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 OSDPv2 interface is provided to connect 3rd party readers.

Off-line Operation

A full off-line database is downloaded to the reader from the host server with subsequent changes to cardholder data automatically sent as updates. This ensures the reader has up-to-date card information when operating in off-line mode. Alarms and transactions recorded in off-line mode are passed automatically to the AC2000 system when reader communications are re-established. This ensures zero down-time at system critical locations.

Frequently Asked Questions

Will my AC2000 system support the new S700 Reader?

The S700 is supported on AC2000 systems version 8.0 and upwards as default. The S700 will be available on version 7.1 systems by means of a patch. For any earlier versions of AC2000, please contact cem.info@tycoint for further information.

What card technologies will the internal read heads/antenna support?

MIFARE (CSN), DESFire (CSN), CEM DESFire 3DES, CEM DESFire AES, iCLASS, iCLASS SE, HID 125Khz Proximity and PicoPass technologies will be supported on-board. Please note the appropriate model should be ordered with the appropriate card technology. All technologies are not supported simultaneously.

How many cardholder records and events can be stored in offline memory?

The S700 can hold up to 250,000 cardholder records and up to 50,000 offline transactions and alarms when offline to the host AC2000 server. All stored information is passed back up to the host server when communications are re-established.

Does the S700e Reader support a full CEM Systems exit reader?

Yes, the S700e supports a full S700 Exit Reader for bi-directional control. Please note the companion S700 Exit Reader card technology must match the associated master S700e reader technology.

Can I swap out an existing s610e Reader for an S700e Reader?

Yes, the S700e can directly replace existing s610e readers. It is important to note that a matching card technology should be selected when ordering the replacement S700e reader.

Does the S700e Reader support third party exit readers?

Yes, the S700e supports either a third party Wiegand exit reader or an OSDPv2 third party reader. Please contact CEM Systems for a full extensive list of supported third party readers.

Is there support for third party readers with keypads?

Yes, the S700 supports third party readers with keypads that support an 8-bit burst.

Does the S700 Exit Reader work in conjunction with the emerald Intelligent Access Terminal?

Not currently. The S700 exit reader must be used in conjunction with a companion S700e master reader. This configuration may be introduced as an enhancement in future releases.

Is the S700 range suitable for outdoor use?

Yes, the S700 range is rated at IP65, therefore suitable for outdoor use within a temperature range -20° to +60° C (-4° to 140° F).

Is a CEM Systems Door Interface Unit (DIU) supported?

Yes, for high security environments a CEM Systems DIU would be recommended. The S700e supports both a mains powered DIU200/210 and also a DIU230 (Hi-power POE+).

Does the S700e support IPv6 networks?

The S700e currently supports IPv4 networks and is IPv6-ready. IPv6 support may be introduced as the market moves towards IPv6 IP addressing.

Is there an S700s Serial Reader equivalent available?

This is not currently part of this release; however, an S700s Serial variant will be released by CEM Systems in the near future. Please contact cem.info@tycoint.com for further information.

Are the S700e custom door modes currently supported on my s610e Reader?

No, not all customer specific door modes as the s610e are supported within the S700 Reader series. Please contact cem.info@tycoint.com for further information.

Does the S700e have support for POE+ on-board?

No, the S700e does not directly support a POE+ supply on-board. The S700e can be used in conjunction with a CEM Systems DIU230 Hi-Power POE+ interface board to power the S700e reader via a POE+ compliant source and associated door furniture. Please refer to the DIU230 datasheet for further information.

What certifications has the S700e received?

The S700e has received FCC and CE certifications.

What voltage range is supported by the S700?

The S700 supports a power source ranging from 9-28 VDC.

How can I purchase the S700 range?

Please contact your CEM Systems account manager for pricing and order enquiries. Please note that there is a 4-6 week lead for any orders at time of launch (March 2017).

S700e Ordering Information

Product Code	Description
RDR/700/003	S700e Card Reader with PIN (125kHz HID Prox and 13.56MHz iCLASS SE)
RDR/700/004	S700e Card Reader with PIN (125kHz HID Prox and 13.56MHz MIFARE DESFire)
RDR/700/006	S700e PicoPass Reader with PIN
RDR/700/007	S700e Card Reader with PIN (13.56MHz MIFARE DESFire)
RDR/700/008	S700e Card Reader with PIN (13.56MHz iCLASS SE)

S700 Exit 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	S700 Exit Card Reader with PIN (13.56MHz iCLASS SE)

For more information email cem.info@tycoint.com or contact your account manager.