

# S610e Reader

## Multi-technology Intelligent IP Reader



### Features that make a difference:

- Intelligent IP card reader designed for use as part of the CEM AC2000 access control software range
- Contactless card presentation with optional Personnel Identification Number (PIN) for two stage authentication
- Integral reading support for 125 kHz HID Proximity, 13.56 MHz smartcard technology including DESFire, Mifare, HID iClass, and PicoPass, as well as a multi technology version to support Proximity and Mifare
- Communicates directly with the host server – no need for an intelligent control panel in the system design
- 10/100 Mbps Ethernet host connection
- Large reader database for off-line card verification and alarms
- Large graphical LCD which is used to display a number of predefined messages
- Four Analog 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
- Weatherproof casing: IP66 rated
- Available in two colours, grey and black

The S610e Card Reader is designed for use as part of an integrated on-line access control system and is used to control access to restricted areas or in special applications where card activation of machinery is required.

The reader, which has an on-board 10/100Mbps Ethernet connection, communicates directly with the CEM AC2000 host server removing the need for an intelligent control panel in the system design.

Using a powerful 32bit processor, the S610e gives full off-line card verification and decision making at the point of entry, even when host communication is not available.

Exit reader options include a twinned S610 Exit reader, Push button or a third party Wiegand Exit read head for IN/OUT control.

The IP66 rated polycarbonate enclosure houses the reader electronics and comes with a large 4x3" keypad, graphical display screen and three LED indicators.

The S610e 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 door locks or other equipment.

### Host Communications

The S610e has an on-board 10/100 Mbps Ethernet host connection allowing it to communicate directly with the AC2000 host server, removing the need for an intelligent control panel in the system design.

### Onboard Card Reading Technologies

Designed for use with all card technologies the S610e device is available with integral reading support for 125 kHz HID Proximity,

13.56 MHz smartcard technology including DESFire, Mifare, HID iClass, and PicoPass, as well as a multi technology version to support Proximity and Mifare. Two additional Wiegand interfaces are available for connecting to other third party readers.

### Proximity to Mifare Smartcard Migration

The S610e multi tech version supports the simultaneous reading of both traditional Proximity and Mifare smart cards. This enables existing sites using proximity cards to migrate to Mifare smartcards with zero system downtime and with no affect on security. The Mifare card can be used for other applications such as cashless vending, biometric storage, logical access and more.

### Off-line Card Validation

The card reader's off-line database is downloaded to the reader's memory from the host computer with subsequent changes to card data automatically sent as updates. This ensures that the reader has up-to-date card information when operating in offline mode. Alarms and transactions recorded in off-line mode are passed automatically to the host system when the reader communications are re-established; reader updates made while off-line are also made good.

### Reader Messages

The S610e has a large 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. Messages to be displayed by the S610e can be modified via the AC2000 software or translated into local languages.

### Easy to Install

The S610e is designed to be extremely easy to install. The installer simply enters the unit IP address on the server, provides it with power, connects to an

Ethernet network and the reader self-configures by means of downloading data from the host. A 50,000 off-line cardholder database can be downloaded in less than 2 minutes. Some configuration setting can also be set using the keypad.

## Remote Programming

The S610e reader can be remotely programmed from the host computer, eliminating the need to physically replace firmware, giving increased system flexibility and efficiency. Some configuration setting can be set using the keypad and operational parameters, e.g. door open time, can also be downloaded to the reader. Standard Operating Modes include, but are not limited to, Door Access, Passenger, Turnstile, Verification, Control Post, and Equipment Enable.

## Requirements

- AC2000 SE access control system
- AC2000 Lite access control system
- AC2000 AE access control system
- RTC Ethernet reader controller licence

## Ordering Information

Product Codes	Description
<b>Grey version</b>	
RDR/610/101	S610e 125khz HID Prox
RDR/610/108	S610e 13.56MHz HID iClass
RDR/610/105	S610e 13.56MHz MiFare
RDR/610/104	S610e Prox & Mifare (Multi-tech)
RDR/610/106	S610e PicoPass
RDR/610/109	S610e External Read Head
RDR/610/107	S610e DESFire
<b>Black version</b>	
RDR/610/111	S610e 125khz HID Prox
RDR/610/118	S610e 13.56MHz HID iClass
RDR/610/115	S610e 13.56MHz MiFare
RDR/610/114	S610e Prox & Mifare (Multi-tech)
RDR/610/116	S610e PicoPass
RDR/610/119	S610e External Read Head
RDR/610/117	S610e DESFire

## Specifications

### Physical

Size . . . . .	142 x 115 x 44mm (5.6 x 4.5 x 1.7")
Weight . . . . .	370g (13oz) with connectors
Housing . . . . .	Flame retardant polycarbonate containing fully encapsulated electronics
Colour options . . . . .	Dark and Light Grey or Black
<b>Power</b>	
Voltage . . . . .	9 – 14Vdc
Current Consumption . . . . .	125 kHz Prox - 200mA (passive), 320mA (peak) DESfire - 320mA (passive), 480mA (peak) iClass - 290mA (passive), 360mA (peak) Pico - 290mA (passive), 360mA (peak) MiFare - 220mA (passive, 290mA (peak)

### Environmental

IP Rating . . . . .	IP66
Temperature . . . . .	-20°C to 60°C (-4°F to 140°F)
LED Indicators . . . . .	Three high intensity LED indicators red, amber and green
LCD Indicators . . . . .	32 x 122 dots Monochrome Graphics supertwist LCD with backlight
Keypad . . . . .	12 character, standard layout, tactile response keypad

### Functionality

Inputs . . . . .	Four analog inputs – voltage supplied, 4 state (tamper detect)
Outputs . . . . .	Two relays fitted – Changeover volt free contacts
Rating . . . . .	30Vdc @ 5A
Duration . . . . .	Programmable suppression device (diode, MOV) required at load
Memory . . . . .	2 MB battery backed memory
Compact Flash . . . . .	32 MB Typical (Optional)
Database Battery Backup . . . . .	3.0V rechargeable Lithium-Ion
Dynamic Database Sizes in Offline Operation . . . . .	8 Byte Mode (card number/Time Zone/PIN/Card Status)
	<b>Card holders</b> <b>Transactions</b>
	210,000              10,000
	150,000              50,000
	80,000                100,000
	3 Byte mode (Card number only)
	<b>Card holders</b> <b>Transactions</b>
	430,000              10,000
	310,000              50,000
	160,000              100,000

### Communication Interface

To Exit Reader . . . . .	RS485 multi-drop cable runs using copper wire with maximum length of 1.2km without repeater
	2 Wiegand interfaces with maximum length of 150m
Connection . . . . .	2 part JST Connector
To System Host . . . . .	10/100 Base-T TCP/IP using CAT5 Unshielded twisted pair cable
Connection . . . . .	RJ45

## Related Products



AC2000 SE



AC2000 Lite



AC2000 AE

[www.cemsys.com](http://www.cemsys.com)