

# S610s Reader

## Multi-technology Intelligent Serial Reader



### Features That Make a Difference:

- Intelligent 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 multi technology version to support Proximity and Mifare
- Contactless card presentation with optional personnel Identification Number (PIN) for two stage authentication
- Communicates directly with the host server – no need for an intelligent control panel in system design
- 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
- Weatherproof casing: IP66 rated
- Available in two colours, grey and black

The S610s 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.

Using a powerful 32bit processor, the S610s gives full off-line validation 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 S610s reader has four analogue inputs, which can be used to monitor door and alarm conditions for transmission to the host computer. All four inputs are four state (tamper detect) capable. Two outputs are also available to control the activation of locks or other equipment.

### Host Communications

The S610s has an RS485 serial port allowing it to communicate directly with the host AC2000 controller.

### Onboard Card Reading Technologies

Designed for use with all card technologies the S610s device is available with integral reading support for 125 KHz HID Proximity, 13.56 MHz smartcard technology including HID iClass, DESFire,

Mifare and PicoPass as well as a multi technology option to support Proximity and MiFare. Two additional Wiegand inputs are available for connecting other reading technologies externally.

### Proximity to MiFare Smartcard Migration

The S610s multitech version supports the simultaneous reading of both traditional Proximity and MiFare cards. This enables existing sites using proximity cards to migrate to MiFare smartcards with zero system downtime and no reduction in 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 hosts system when the reader communications are re-established; reader updates made while off-line are also made good.

### Reader Messages

The S610s 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 S610s can be modified via the AC2000 software or translated into local languages.

## Remote Programming

The S610s reader may 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 AE access control system
- ECM (requires additional RTC license) or S9032 controller

## Ordering Information

Product Codes	Description
<b>Grey version</b>	
RDR/611/101	S610s 125khz HID Prox
RDR/611/105	S610s 13.56MHz MiFare
RDR/611/104	S610s Prox & MiFare (Multi-tech)
RDR/611/106	S610s PicoPass™
RDR/611/109	S610s External Read Head
RDR/611/108	S610s 13.56MHz HID iClass
RDR/611/107	S610s DESFire
<b>Black version</b>	
RDR/611/111	S610s 125khz HID Prox
RDR/611/115	S610s 13.56MHz MiFare
RDR/611/114	S610s Prox & MiFare (Multi-tech)
RDR/611/116	S610s PicoPass™
RDR/611/119	S610s External Read Head
RDR/611/118	S610s 13.56MHz HID iClass
RDR/611/117	S610s 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 . . . . .	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 or non-tactile response keypad

### Functionality

Inputs . . . . .	Four analog inputs – voltage supplied
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)

Card holders	Transactions
210,000	10,000
150,000	50,000
80,000	100,000

Card holders	Transactions
430,000	10,000
310,000	50,000
160,000	100,000

Transactions . . . . . Up to 8,000 transactions in offline operation.

### 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 Host Controller . . . . .	RS485 multi-drop cable runs using copper wire with maximum length of 1.2km without repeater
Connection . . . . .	2 part JST Connector

## Related Products



AC2000 SE



AC2000 AE

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