

# S610s Reader

## DESfire

### 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 the option to enable Personnel Identification Number (PIN) for two stage authentication
- Integral reading support for 13.56 MHz MiFare DESfire smartcard technology
- Connection to host via s90xx range of controllers or Ethernet Communication Module (ECM)
- 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 gray 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 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 S610s reader has four analog 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 S610s has an RS485 serial port allowing it to communicate directly with the host AC2000 controller or Ethernet communications Module.

#### Onboard Card Reading Technologies

Designed for use with 13.56 MiFare/DESfire smartcard technology. Two additional Wiegand interfaces are available for connecting third party readers.

#### Off-line Operation

A full off-line database is downloaded to the reader from the host server with subsequent changes to card data automatically sent as updates. This ensures 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 AC2000 system when reader communications are re-established.

#### 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 displayed by the S610s can be modified via the AC2000 software.

#### Remote Programming

The S610s reader can be remotely programmed from the host computer, eliminating the need to physically replace firmware, giving increased system flexibility and efficiency. Standard Operating Modes include, but are not limited to, Door Access, Passenger (extended opening time), Turnstile, Verification, Control Post, and Equipment Enable mode.

## Specification

### Physical

Size . . . . . 142 x 115 x 44mm (5.6 x 4.5 x 1.7inch)  
 Weight . . . . . 370g (13oz) with connectors  
 Housing . . . . . Flame retardant polycarbonate containing fully encapsulated electronics.  
 Color options . . . . . Dark and Light Gray or Black

### Power Requirements

Voltage . . . . . 9 – 14Vdc  
 Current Consumption . . . . . 340mA (passive), 440mA (Active)

### 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 LCD with backlight  
 Keypad . . . . . 12 character, standard layout, tactile response keypad

### Functionality

Inputs . . . . . Four analogue inputs – voltage supplied, 4 state (tamper detect)  
 Outputs . . . . . Two relay fitted – changeover volt free contacts  
 Rating . . . . . 30Vdc @ 5A  
 Duration . . . . . Programmable suppression device (diode, MOV) required at load  
 Memory . . . . . 2MB battery backed memory  
 Database battery backup . . . . . 3.0V rechargeable Lithium-Ion

### Dynamic Database Sizes

In Offline Operation . . . . . 8 Byte Mode (Card number, Timezone, PIN, Card Status)  

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

  
 3 Byte Mode (Card Number Only)  

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

### Communication Interface

To Exit Reader . . . . . RS485  
 Interfaces . . . . . Two Wiegand interfaces with a maximum cable length of 150M  
 Connection . . . . . 2 part JST connector  
 To Host Controller . . . . . RS485 multi-drop with a maximum cable length of 1.2Km without repeater  
 Connection . . . . . 2 part JST connector

## Requirements

- AC2000
- AC2000 Airport
- ECM or S90XX controller

## Ordering Information

Product Codes	Description
<b>Gray Version</b>	
RDR/611/107	S610s 13.56MHz Mifare/DESfire
<b>Black Version</b>	
RDR/611/117	S610s 13.56MHz H Mifare/DESfire

## Related Products



AC2000  
 AC2000 Airport  
 AC2000 Lite

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