

# S610s Reader

## Multi-technology Intelligent Serial Reader

### OVERVIEW

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.

Designed for use with all card technologies the S610s device is available with integral reading support for 125 KHz HID Proximity, 13.56 MHz MiFare, PicoPass smartcard and DESFire as well as a multi-technology option to support Proximity + MiFare. Two additional wiegand inputs are also available for connecting other reading technologies externally or an Exit read head for IN/OUT control.

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

The reader has 4 analogue inputs, which can be used to monitor door and alarm conditions for transmission to the host computer. Two outputs are also available to control the activation of locks or other equipment.



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### FEATURES

- Industry's most advanced card reader
- Integral reading technology for Proximity, MiFare, DESFire, Proximity + MiFare or Inside PicoPass.
- Structured database allows storage of large amounts of cardholder records for off-line card validation
- Backlit Monochrome Graphics LCD display with heating element provides localised character sets and instantly recognisable icons under the most extreme conditions
- Universal Reader - supports all card technologies
- Keypad for configuration and optional personnel Identification Number (PIN)
- 4 analogue inputs to monitor alarm conditions and 2 changeover relay outputs to activate door strike or other equipment
- Remote programming facility to download program
- Broadcast Facility to enable selective operational mode

**PRODUCT HIGHLIGHTS**
**Host Communications**

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

**Onboard Card Reading Technologies**

The S610s supports onboard head technologies for 125 KHz Proximity, 13.56 MHz MiFare, DESFire, HID iClass and Inside PicoPass, as well as a multi technology version supporting Proximity + MiFare. Other technologies can be supported using the two available onboard Wiegand connections.

**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 card 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, etc.

**Off-line Card Validation**

The card database is initially 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 off-line mode. Operating in off-line mode the reader can hold in excess of 200,000 cards.

**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 etc. Messages to be displayed by the S610s can be modified by 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. Operational parameters, e.g. door open time, can also be downloaded to the reader.

**TECHNICAL 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
Power	
- Voltage	9 – 14Vdc
- Current Consumption	200mA (passive), 320mA (peak)

**ENVIRONMENTAL**

IP Rating	IP66
Temperature	-20° to 60°C (-4° 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, etc.)
required at load	
Memory	2 MB battery backed memory
Compact Flash	32 MB Typical (Optional)
Database	
Battery Backup	3.0V rechargeable Lithium-Ion

- Cardholders	Storage of up to 219,000 cardholders at the door. 438, 848 cardholder in 24bit mode.
- Transactions	Up to 8,000 transactions in offline operation.
Configuration	Operational parameters are downloaded from host computer. Some configuration setting can also be set using the keypad.
Standard Door Operating Modes	Door Access, Passenger, Turnstile, Verification, Manned Control Post, Equipment Enable

**COMMUNICATION INTERFACE**

To Exit Reader	RS485 multidrop cable runs using copper wire with maximum length of 1.2km without repeater
Connection	2 part JST Connector
To Host Controller	RS485 multidrop cable runs using copper wire with maximum length of 1.2km without repeater
Connection	2 part JST Connector

**OFF-LINE CARD VALIDATION**

32 bit- 200,000+  
24 bit-438,848+

**PRODUCT CODES**

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

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