

# S610f Fingerprint Reader

## Fully Integrated Biometric Solution



### Features that make a difference:

- Fast card and fingerprint verification, uses 1:1 fingerprint match at the door
- Secure storage of fingerprint on the central access control server and the S610f internal database using RC4 encryption
- Uses Suprema Fingerprint module giving a high resolution scan. Detects conductivity of the living tissue beneath the skin. Exceeds FBI requirements and is FIPS201 certified
- Integral reading technology for Proximity, Mifare, iClass, DESFire and dual technology (Prox/Mifare)
- Fast fingerprint enrolment and connection over 10/100 Mbps Ethernet, no need for an intelligent controller in the system design
- Structured database allows storage of large amounts of cardholder records for off-line card validation
- 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

The S610f Card and Fingerprint Reader is a fully integrated biometric and access control Reader. Used as part of the AC2000 access control system, the S610f controls access to restricted areas where an additional biometric layer of security is required.

The reader, has on-board 10/100Mbps Ethernet and communicates directly with the AC2000 host server removing the need for an intelligent control panel in the system design. Featuring a controller, advanced IP card reader and single biometric solution all in one, the S610f fingerprint reader meets requirements for three stage identity authentication (card, PIN, and biometric verification) using one device.

Using a powerful 32bit processor and a large internal database, the S610f gives full off-line card validation and biometric verification decision at the door, even when host communication is not available.

Designed for use with all card technologies the S610f device is available with integral reading support for 125 kHz HID Proximity or 13.56 MHz MiFare and iClass, DESFire and dual technology (Prox/Mifare).

The IP30 rated (indoor use) polycarbonate enclosure houses the reader electronics and comes with 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 door locks or other equipment.

### Fully integrated biometrics & access control solution

The S610f features a controller, advanced IP card reader and industry leading Suprema fingerprint module all in one device.

### Single process & network solution

Fingerprint enrolment is captured and stored via the AC2000 access control system at the same time as cardholder enrolment. This offers clients a single solution and eradicates the requirement to purchase a separate biometric reader and software application to link to the access control system.

### Host Communications

The S610f has an on-board 10/100 Mbps Ethernet allowing for fast fingerprint enrolment over the TCP/IP network using RC4 encryption. The S610f communicates directly with the AC2000 host server, removing the need for an intelligent control panel in the system design.

### Onboard Card Reading Technologies

The S610f supports onboard card reading technologies for 125 KHz Proximity and 13.56 MHz Mifare, iClass, DESFire and dual technology (Prox/Mifare). Other technologies can be externally supported using the two available onboard Wiegand connections.

## Off-line Card Validation

The card details and biometric templates are 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 123,000 fingerprint templates.

## Reader Messages

The S610f has a large graphical LCD which is used to display a number of predefined messages to cardholders to inform them when using the reader e.g. Place Finger, Retry Finger, Bad Biometric, Wrong TimeZone, Lost/Stolen Card, Card About to Expire, Access Granted etc. Messages to be displayed by the S610f can be modified via the AC2000 software or translated into local languages.

## Ordering Information

Product Code	Description
RDR/615/101	S610f 125kHz HID Prox
RDR/615/104	S610f Dual Tech (Prox/Mifare)
RDR/615/105	S610f 13.56MHz MiFare
RDR/615/108	S610f 13.56MHz HID iClass
RDR/615/107	S610f DESFire

## Specifications

### Physical

Size . . . . . 190 x 120 x 44mm  
 Weight . . . . . 590g (13oz) with connectors  
 Housing . . . . . Flame retardant polycarbonate containing fully encapsulated electronics.  
 Colour . . . . . Dark and Light Grey

### Power

Voltage . . . . . 9-14Vdc  
 Current Consumption . . . . . 260mA (passive), 470mA (peak)

### Environmental

IP Rating . . . . . IP30  
 Temperature . . . . . 0° to 55°C (32°F to 131°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 . . . . . 128 MB Typical (Optional)

### Database

Battery Backup . . . . . 3.0V rechargeable Lithium-Ion  
 Database Cardholders . . . . . Storage of up to 123,000 cardholders. (Two fingerprint templates per cardholder)  
 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 Operating Modes . . . . . Door Access, Passenger, Turnstile, Verification, Control Post.

### Communication Interface

To System Host . . . . . 10/100 Base-T TCP/IP using CAT5 Unshielded twisted pair cable  
 Connection . . . . . RJ45

## Requirements

- AC2000 SE v5.7 software & upwards
- AC2000 AE v6.6 software & upwards
- AC2000 Lite v6 software & upwards

## Related Products



AC2000 SE



AC2000 AE



AC2000 Lite

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