S610f Fingerprint Reader
Multi-Smartcard
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 fingerprints on the central AC2000 server and on the S610f internal database
- Fingerprint module gives a high resolution scan and detects conductivity of the living tissue beneath the skin
- Integral reading support 13.56 MHz HID iClass SE, iClass Legacy, DESfire SE, Mifare/DESfire CSN (Mifare 1K, Mifare 4K, Mifare Classic, Mifare Ultralight, EV1 8K) smartcard technology
- Fast fingerprint enrollment 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 analog inputs to monitor alarm conditions and 2 changeover relay outputs to activate door strike or other equipment
- FIPS201 certified

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.

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 analog 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 fingerprint module all in one device.

Single process & network solution
Fingerprint enrollment is captured and stored via the AC2000 access control system at the same time as cardholder enrollment. 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 enrollment over the TCP/IP network using 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 Technology
The S610f supports on-board card reading technologies for 13.56 MHz HID iClass SE, iClass Legacy, DESfire SE, Mifare/DESfire CSN (Mifare 1K, Mifare 4K, Mifare Classic, Mifare Ultralight, EV1 8K). Other technologies can be externally supported using the two available on-board 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 displayed by the S610f can be modified via the AC2000 software.
Specification

Physical
Size .................... 190 x 120 x 44mm
Weight .................. 590g with connectors
Housing ................ Flame retardant polycarbonate containing fully
encapsulated electronics.
Color .................. Dark and Light Gray

Power Requirements
Voltage .................... 9 – 14Vdc
Current Consumption ...... 290mA (passive), 470mA (active)

Environmental
IP Rating .................. IP30
Temperature ................ θ°C 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 LCD with
backlight
Keypad .................. 12 character, standard layout, tactile response
keypad

Functionality
Inputs .................. Four analog 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

Database
Database Cardholders .......... Storage of up to 123,000 cardholders (Card
number, Two fingerprint templates, Timezone,
PIN, Card Status).
Transactions ................ Up to 8,000 transactions in offline mode.
Configuration ............. Operational parameters are downloaded from
the host. Some configuration settings
completed locally using integrated keypad.
Operating Modes .......... Door, Passenger (extended opening), Turnstile,
Control Post.

Communication Interface
To Exit Reader .......... RS485
Interfaces ............... Two Wiegand interfaces with a maximum cable
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

Regulatory
Agency Certifications ....... FCC Part 15
CE

Requirements
• AC2000
• AC2000 Lite v6 upwards
• AC2000 Airport v6.6 upwards
• RTC Ethernet Reader Controller

Ordering Information

<table>
<thead>
<tr>
<th>Product Codes</th>
<th>Description</th>
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| RDR/615/608   | S610f 13.56MHz HID iClass SE, iClass Legacy, iClass SE Pico, DESfire SE, Mifare/DESfire CSN
(IFARE 1K, MIFARE 4K, MIFARE Classic, MIFARE Ultralight, EV1 8K) smartcard technology |

Related Products

AC2000
AC2000 Lite
AC2000 Airport

Approvals

www.cemsys.com