CEM SYSTEMS

A Tyco International Company

S610f Fingerprint Reader
Fully Integrated Biometric Solution

FEATURES

OVERVIEW

The S610f Fingerprint Reader is a fully integrated biometric and access control reader that is used as part of the AC2000 SE (Standard Edition) and AC2000 Lite systems to control access to restricted areas where an additional biometric layer of security is required.

The reader, which has an on-board 10/100Mbps Ethernet connection, 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 unique 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.

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.

S610f Fingerprint Reader

- Does not require smartcards, works with 125 kHz Proximity

- Fast verification using a 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, and iClass

- 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

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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 and iClass. 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.

TECHNICAL 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)
Humidity	Unlimited, also condensing
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 Database	3.0V rechargeable Lithium-Ion
Cardholders	Storage of up to 123,000 cardholders. (Two fingerprint templates per cardholder)
Transactions	Up to 50,000 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

PRODUCT CODES

RDR/615/101	S610f 125khz HID Prox
RDR/615/105	S610f 13.56MHz MiFare
RDR/615/108	S610f 13.56MHz HID iClass

MINIMUM TECHNICAL SPECIFICATIONS
AC2000 SE software v5.7 upwards
AC2000 Lite software v6 upwards

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