



ELECTRONIA



EL SMART

SMART FP BIO TERMINAL

The EISmart Fingerprint BIO terminal is the latest in the series of EISmart terminals designed by Electronia for Access control with fingerprint authentication operation for enhanced system security. These terminals can be used in high security areas to grant access or to avoid proxy punching as in the case of Attendance terminals.

The System is based on dual factor authentication combining the secure Smart card technology with the Fingerprint based Biometric identification technique to positively identify a cardholder. The fingerprint verification module is silicon capacitance based fingerprint module with false rejection rate of less than 1%. It is much more foolproof than conventional optical fingerprint modules.

This solution complies with the state-of-the-art Industry practices for Secure Access Control and Attendance Applications.

Features & Benefits

- o Solid state, Capacitive Fingerprint Sensor with enhanced imaging, superior ESD performance and rugged operation
- o Industry's most accurate Fingerprint Algorithm (FVC2004)
- o DSP based verification, resistant to swollen, dirty, aged, scarred fingers
- o Multiple interface options for Terminal polling & diagnostics
- o Unique Terminal ID and expandable System configuration
- o Dual factor verification using Smartcard and Fingerprint
- o 1:1 Verification with live image and stored image in the smart card
- o ISO/IEC 14443 compliant Contactless Smart card Technology
- o Generates and logs up to 4,000 time-stamped transactions onboard
- o 1000 Black List database capability
- o Secure Terminal operation with customer defined Digital ID
- o Real-time clock
- o Interface to electric door strikes, barrier controls
- o MS Windows based Enrollment, Card Programming and Polling
- o Simple Plug and Play installation
- o Indoor operation

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Technical Specifications

General

Application	Access Control / Attendance / Access control and Attendance with time logging system
Biometric verification	'Never' / 'Always' (validation through Smart card only), Based on Smart Card
Smart Card Type	ISO/IEC 14443 compliant Contactless card
Card Operating Distance	Up to 50 mm
Mode of Operation	Standalone / Online
Event Storage	4,000 Logs (with error tone on buffer exhaust) Error tone can be Enabled/Disabled for Access terminal
Communication Interface	RS232, RS485, Ethernet (TCP/IP) (with external adapter), Dial up Modem (Internal or External), Wireless (GSM Data)
Status Indicator	Green LED for IN, Red LED for OUT
Audio Alert	Piezo Buzzer
Relay Output Control	1 Contact (Normally Open), Current Rating: 1A@24V DC, 0.5A @ 125V AC
Input Control	Emergency switch operated door control plus two optically isolated inputs (optional)
Fingerprint Sensor	Silicon capacitive sensor with enhanced imaging and superior ESD Performance (Resistant to classic finger marks, edge distortion, scarred, dirty and oily finger)
Fingerprint Module	DSP Based design Industry's most accurate Fingerprint algorithm (FVC2004)
Sensor Resolution	250 dpi (128 x 128 sensor array)
Fingerprint template size	348 bytes
User population	Limitless (Finger Template stored on Smart Card)
Finger Verification time	1.5 to 2 seconds
Card reading time	1.5 to 2 seconds
Overall card verification and stamping time	3 seconds (typical)
Verification:	1:1 with live image and the stored image in the smart card
False finger Acceptance Rate	< 0.01 % (adjustable)
False finger Rejection Rate	< 1% (adjustable)

Environmental

Operating temperature Indoor/Office Use	0 ° C to +45 ° C
Storage Temperature	0 ° C to +70 ° C
Relative Humidity	10% to 80% (non condensing)
Real time Clock Accuracy	± 15 seconds per month

Power Supply & Mechanical

External Power Supply	Input 110/220 VAC, Output 7.5VDC
Power Consumption	Less than 1 Amp @ 7.5 VDC
Mechanical Design	Wall mountable

Ordering Information

Option 1

Part Number: 100-00070-00000
Terminal, Smart AA, FP Biometric

Option 2

Part Number: 100-00084-00000
Reader, Split, FP Bio, Black

