



New Generation Solutions

ElSmart G4

A stylish, compact and more powerful ElSmart terminal.

SMART ACCESS & ATTENDANCE TERMINAL



El Smart's, ISO 14443 compliant, rugged and compact Smart card Terminal is the perfect partner to Electronia's Access, Attendance, and e-purse applications. It works for an organization of any size and structure with multiple locations and multiple shifts. The entire system is extremely flexible and can be configured to suit user requirements. The terminals can be configured to operate with only contactless smart cards, or with a combination of smart cards and fingerprint sensors. In standard Elsmart configuration, 1 to 120 Terminals can be connected in a multi-drop interface. In Elsmart plus configuration, the system supports 128 sites with 128 Terminals per site. These terminals can also be configured in either Online or Offline mode: Online, with multiple connectivity solutions such as RS232, RS485, Ethernet LAN or telephone line through dial up Modem. The terminal can store up to 4,000 records and has features such as Buffer exhaust warning, Blacklist, and Flash memory to ensure data availability in case of a power failure. The terminal provides relay output contacts that can be connected to an electric door lock. Optically isolated input is provided to connect the fire alarm system of the building to ensure that doors are open during an emergency.

This user friendly terminal consists of a controller PBA (Printed Board Assembly), a card reader, LCD (Liquid Crystal Display), LEDs and an audio alert to interactively provide the status of the terminal's operation. The controller continuously monitors the reader and the fingerprint verification unit. The LCD Displays the transaction details in addition to date and time. When a Smart card is brought within the reading range of the terminal, the card reader senses and reads the data on the card and transfers it to the controller for validation. If the data is valid, access is granted or attendance is logged based on the configuration of the terminal. This is indicated by LCD and LED display. Distinctive audio alert tones are provided for entry and exit. The LCD shows the name (Alias Name) or the badge Number of the user along with the entry/exit indication for attendance terminals.

The terminals can be used in high security areas to grant access or to avoid proxy punching in case of Attendance terminals. This operation of Smart Card along with the fingerprint provides the highest level of security.



Elsmart Plus Terminal Specifications

1. General

Application	Access & Attendance
Smart card	ISO/IEC 14443 (contact less) card
Operating Distance	0 to 30 mm
Mode of Operation	Stand alone/on line
Visual Indication	Red/Green LEDs

Authentication Options

Smart Card Only,
Based on Smart Card,
Biometric & Smart Card
Bio only

Card Formats

Elsmart	Elsmart 1K card based format (Restricted to 120 Terminals)
Elsmart Plus	Elsmart Plus 4K card based format (128 Site X 128 Terminal per site)
Card Reading Time	<1 sec
Biometric Verification Time	<3 sec

2. Hardware

Processor	Based on ARM core processor
Real-time clock:	Built-in
Battery backup	3V, Lithium CR2032, 5 years life
Graphical LCD Display	Monochrome 128 x 64 Graphic Display Module Backlight on/off control

LED Indication

Red/Green LED

OUTPUT Control

Door control Relay contact
(Normally Open/Close selectable)

INPUTS

Two optically isolated inputs

Flash Programming

Firmware upgradeable through serial port

3. Communication

Serial Port	RS232/485 selectable
Ethernet	DHCP/STATIC IP mode programmable
Modem	33/56K Analog Telephone modem

4. Terminal Features

Transaction Storage:	4,000 Logs 'Warn: Low Memory' 10% free memory 'No Free Memory' @4,000 logs 400 Records
ATP Database:	Error Tone with display of one of the messages. 'Access Denied', 'Card Expired,' 'Exit Missed', 'Entry Missed' or 'Access Barred'

5. Other Features

PC based Terminal configuration
Terminal diagnostics
Expiry Date alert
LCD Backlight turnoff option
At the Terminal Programming (ATP)

6. Environmental, Electrical and Mechanical

Operating Temperature	0° C to +45° C (Indoor unit) 0° C to +60° C (Outdoor unit)
Storage Temperature	0° C to +70° C
Mechanical Mounting	Wall mountable, fastened by tamper proof screws

7. Ordering Information

1. Part Number: 100-00095-00000	Terminal, Smart AA, Indoor, G4
2. Part Number: 100-00096-00000	Terminal, Smart AA, FpBio, G4
3. Part Number: 100-00100-00000	Terminal, Smart AA, Outdoor, G4
4. Part Number: 100-00083-00000	Term, SAA, Split, Indoor,Black
5. Part Number: 100-00086-00000	Term, SAA, Split, Indoor,White
6. Part Number: 100-00087-00000	Terminal, SAA, Split, Outdoor



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