



New Generation

EL SMART

Access Control

Reader



ELSMART ACCESS CONTROL READER



ELSMART G4 is the Fourth generation Access Control Reader from Electronia. It offers state-of-the-art Access Control functions, fully compliant with ISO/IEC14443 standards. G4's modular architecture integrates the access terminal with an embedded controller. EISmart ACS readers authenticate a 13.56 MHz contactless Smart card and communicate directly with the centralized Server through an IP network. G4 offers an amazing access control performance of less than 3 seconds by embedding required intelligence in itself to authenticate a smart card without the Backend Server support.

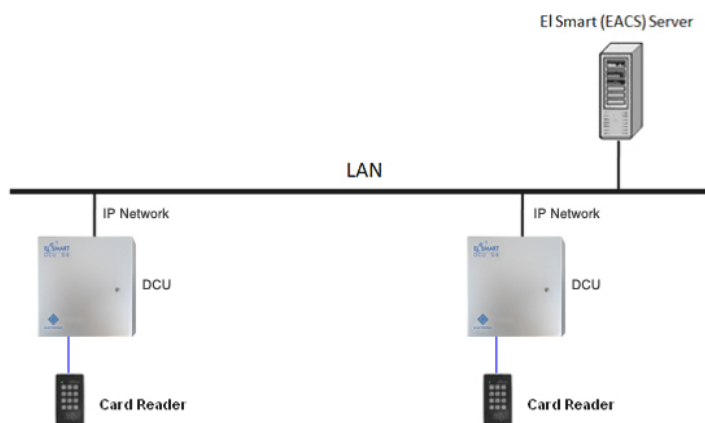
The ELSMART software controls access to areas where the Smart card terminal is connected to an electric door lock mechanism. Cardholders are permitted to access only those areas for which they have authorization. Any attempt to enter an unauthorized zone is restricted by the system.

ELSMART Systems supports multiple profiles matching with operational suitability and assured safe and secured facility access.

- EISmart Access Control Reader with PIN Verification incorporates PIN keypads. The system employs a dual-factor authentication mechanism using a contactless smart card and 4 digits PIN to authenticate the card holder. It also verifies the access rights of the user by verifying if he/she is authorized for an entry at the applied terminal. The secret PIN code entered by the card holder is generated based on pseudo random number generation algorithm. This allows for code modification or change in specific period of time to ensure the security.
- EISmart Access Control Reader with Fingerprint Biometrics also offers a dual-factor authentication using Contact less Smart Card along with a new generation Silicon Capacitive finger scanning Sensor. The biometric offers 3D sensing and Live Finger detection for 1:1 verification against with the securely stored template in the card. The new generation Fingerprint sensor (3D capacitive) has excellent Fraud detection capabilities.

Features & Benefits:

- Vandal resistant design.
- Enhanced access protection with Intelligent IP enabled Door Controller module (DCU).
- Multi-Level split terminal architecture with a Card Reader or Fingerprint Reader for the non-secure side and the DCU on the secure side of the entrance.
- Built-in real-time Clock to time stamp the verification.
- Built-in Memory to record up to a maximum of 4000 access/attendance transactions.
- The DCU has capability to store the transaction logs and alarm information and provide real-time log details.
- State-of-the-art Controller design to eliminate any intermediary controllers and additional wiring requirements.
- Supports Anti-pass back feature with advanced configuration capabilities :
 - Designate card readers as Entry/Exit devices
 - Support creation of Anti-pass back zones
 - Global Anti Pass back based on latest access records stored in the Smartcard. Access to a particular zone is permitted or denied based on the last entry verification.
- Built-in DURESS code support using reverse order PIN or fixed code entry.
- Tamper Protection feature for both card reader and DCU
- At Terminal Programming (ATP) support for instant privilege modification on a card. Any Server configured access privilege changes will be communicated to DCUs to carry out an on-the-fly card programming operation to update settings when the card is presented to any of the terminal next time.
- Programmable Timer settings for the door activation and Open/Close sensor alarm.
- Designated Unique ID for each DCU which is duly generated from the Site and Terminal number.
- Supports integration with other Enterprise Security Systems.
- Support multiple combinations of Dual-factor authentication





TECHNICAL SPECIFICATIONS

General

Application	Access Control
Card proximity Distance	0-30mm
Mode-of-Operation	Stand alone/on-line
Visual Indication	Red/Green LED's
Authentication Time	Card Only : <1 Seconds; Card Key Pad : <3 Seconds; Card Fingerprint Biometric : <3Seconds
Storage	4000 Logs
Audio Alert	Piezo Buzzer
External Hardware Support (Single Entry)	Doors, Turnstile, Raised Arm Barrier, Road Blocker
Processor	ARM9 based 32 bit Micro controller
Interface support	Ethernet (TCP/IP), RS232, RS485
Keypad	Vandal Resistant 12 button Keypad
Tamper Alarm	Alarm for DCU and Reader

Mechanical

Dimensions	Card PIN Keypad : 120mm x 75mm x 30mm Card Fingerprint Biometric: 130mm x 75mm x 35mm Controller Unit (DCU): 159mm x 167mm x 43mm
Color	Black, White
Material	Card PIN Keypad: Polycarbonate Aluminum Base Card Fingerprint Biometric: ABS Polycarbonate
Mounting	Wall Mountable, Base Plate Mountable Enclosure

Environmental

Operating Temperature	Card PIN Keypad: -10°C ~ + 65°C Ambient Card Fingerprint Biometric: 0°C to ~ 45°C
Operating Humidity	5%~100% Ambient
Ingress Protection	IP 65

Communications

Serial Port	RS232/485 Selectable
Ethernet	RJ45, support Static/DHCP IPV4 configurations
Modem	56K Analog Telephone Modem (External)

Power Supply

Operating Voltage	Input 110/220 VAC, Output 5V, 12V DC
Battery Back-up	3V, Rechargeable

Design & Specifications are subject to modification without any prior notifications