Passagesystem
2011

elatac

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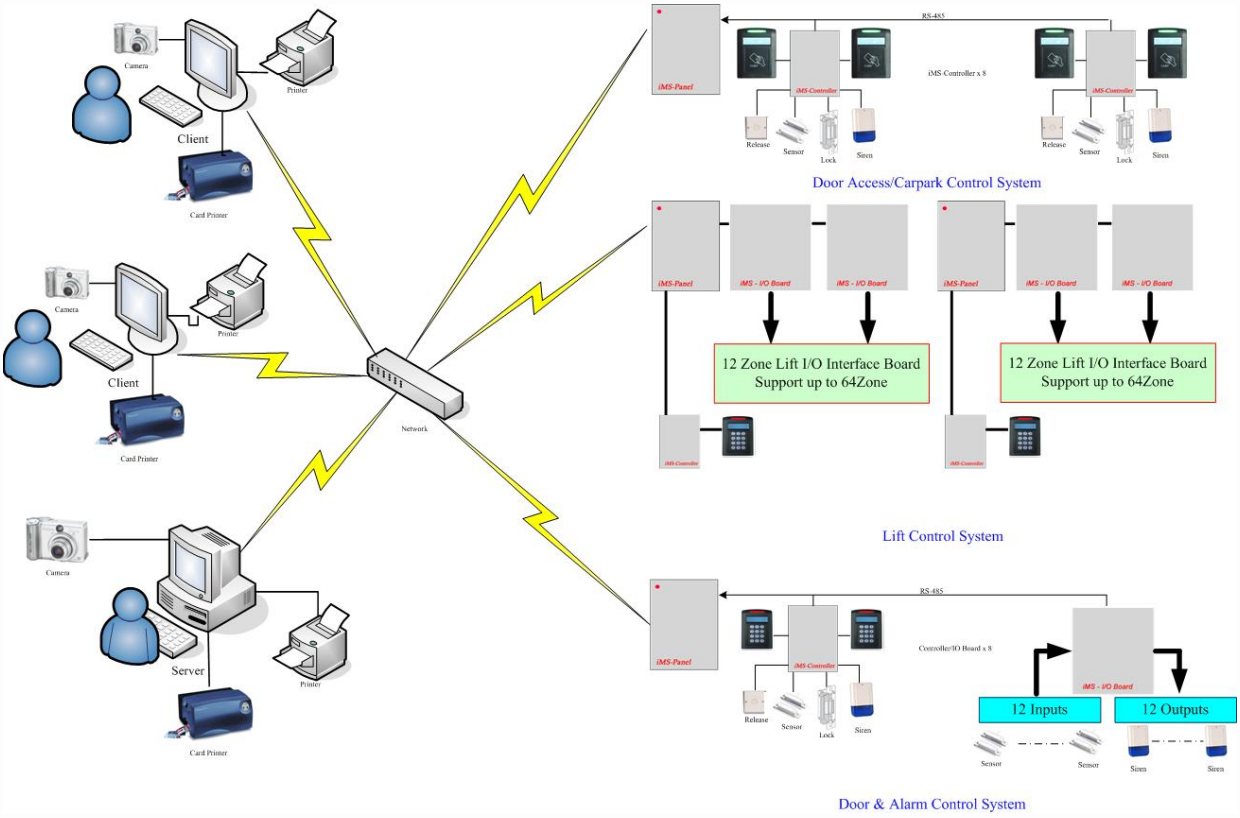
Intelligent Management System *(iMS-Series)* http://www.elatac.com

iMS-Series is an integrated solution that is built on top of the internet. The system can support access control, lift control, car park control, alarm monitoring and time attendance. The management software helps you to control access for multiple sites in the world via internet; it provides you with the powerful and flexibility to exercise complete control over who goes where and when. The software supports any type of card format and reader technology including RFID, Smart Card, Octopus, Biometric Devices and etc.



Door Access Control Features:

The Door Access Control is the main module of the intelligent Management System. The system provides different access methods, door control and user control setting. It is integrated with the Time Attendance Features for the company to generate the attendance reports.

Lift Control Features:

The Lift control system can support both high level interface (M10 Lift) and Low level interface (Dry Contact). The system provides flexible user setting to configure the Free Access for individual floor or multiple floors, Different Access Methods, User Access Time Zone with Different floor setting.

Inteligent Management System (iMS-Series)

http://www.elatac.com

Car park Control Features:

Car park control is based on the group Anti-pass back control feature. It could be used for residential area to control the car park slot available for a group of users/family. The system allows a group of user to share a car park slot or multi slot. The system also provides counting for parking car & full sign display when the parking slot is full.

Alarm Monitoring Features:

The system provides Alarm Monitoring with E-map. When an intrusion alarm is detected by the system, the associated E-map would be popped up on the screen to alert operators to take corresponding actions. This feature alerts the operator immediately once something wrong has happened in the system.

Software Features:

- Multi-Administrator Level
- Database Backup & Restore
- Badge Design & Printing
- Remote Control & Monitoring
- Support Multiple Cards
- Photo Taking & Real Time Display
- Central Warning/Alert
- Time Attendance Report

Door Access Control

- Multi-Access Methods for Doors
- Multi-Time Zone for Users
- Anti-Pass back
- Supervisor Control

Car Park Control

- Group Anti-Passback
- Counting for parking space
- Full Sign Control

Lift Control

- High/Low Level Interface
- Individual floor Time Zone Setting

Alarm Control & Monitoring

- E-Map Display
- Time Zone Setting for all inputs

Hardware System Capacity:

- 12,000 users (expand to 1,000,000 users)
- 12,000 transactions (expand to 1,000,000 transactions)
- Unlimited transaction in Server
- Support up to 1024 doors
- 128 time zone setting
- 128 group setting
- 32 periods holiday setting

Car Park Control

- 10 parking Space for one Group Persons
- intelligent checking for RESET parking space

Lift Control

- 64 floors for single lift

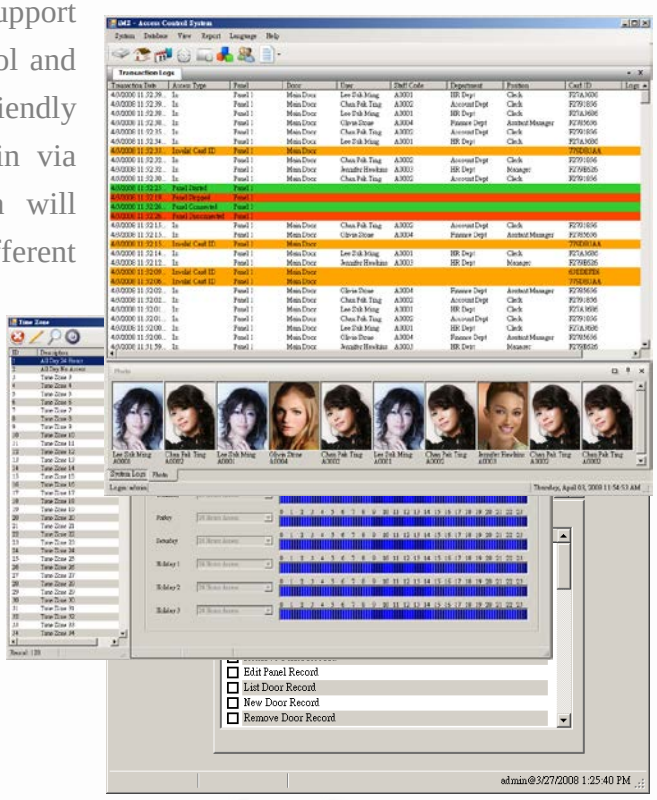
Alarm Control & Monitoring

- 10,000 Inputs & Outputs Points
- Time Zone Control for all the inputs

iMS Software *(S01)*

http://www.elatac.com

iMS Software is central control software that support access control, car park control, elevator control and alarm monitoring. The software provide user friendly graphic interface and support multi user login via internet. For each administrator, the system will accord to their administration level to active different system features.



General Features:

- Support up to 1,000,000 users
- Support up to 1024 doors
- View Real-time Transaction Log
- Provide Multi-Administrative Level
- View Real-time photo imaging
- Support Photo Taking & Badge Printing
- Support Scheduled user import
- Establish flexible Access Right Setup
- Provide Door , Time Zone & Holiday Setup
- Support Issuer Card Reader
- Support Field level audit trial
- Support ODBC
- Provide Multi-Language environment
  - English
  - Traditional Chinese
  - Simplified Chinese
- Reporting
  - Daily, Monthly, Yearly Door Transaction
  - First In & Last Out Attendance taking
  - Late, Absent, Total Working Hour
  - and etc

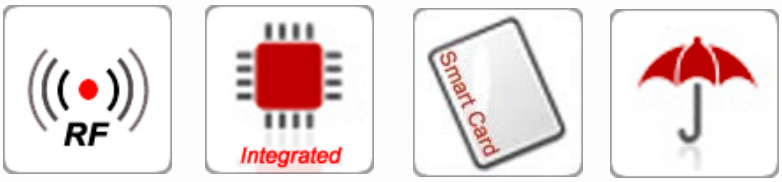
Environment:

Operation System:	Win2000, XP, Vista and Win 7
Database Engine:	MSDE or SQL
Server Requirement	P4 2GHz, 1G Ram, or above
Client Program	P4 or above 512M Ram

EM Reader with Keypads *(R30K)*

http://www.elatac.com

EM R30K Reader with Keypads (wiegand) is a weather proof contactless smart card reader. The reader adopts the widely recognized EM technology. It provides high reliability, fast response time and low power consumption for a wide range access control system. In build in bi-color LED and Buzzer to provide visible alert for users. The wiegand interface protocol interface compatible with all standard access control system.



General Features:

- Wiegand 26, 34 or read block output are available
- 3x4 Keypads with Bell button
- Keypads to Wiegand Output
- Bi-color LED (Red, Green) Indicator
- Build-in buzzer
- Up to 50mm card read/write operation range
- Fast verification time < 0.2 sec.
- Store and Protect Card Key
- True anti-collision
- Key Store

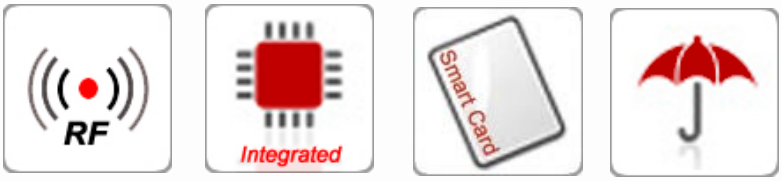
Specification:

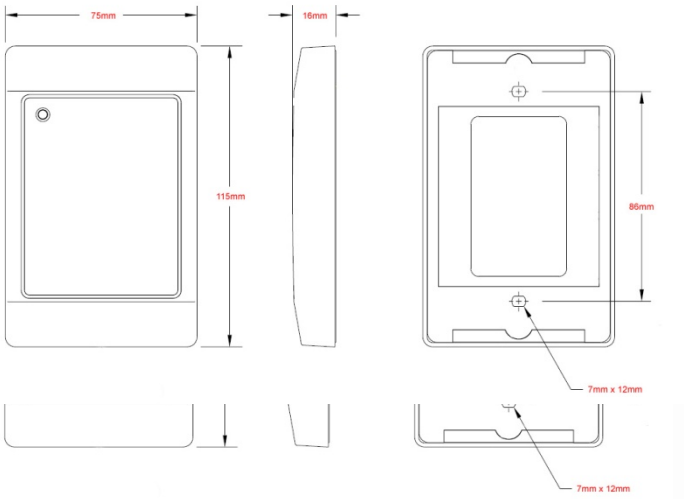
Power Supply :	12VDC, 120mAmax
Read Range :	≥ 50 mm (Under standard 4 cores Mifare Smartcard)
Transmit Frequency :	125KHz
Compatible Card :	EM series Proximity Card
Operating Temperature :	0°C to + 40°C
Control Format :	Wiegand 26 bits
Dimension :	114 x 74 x 17 mm
Color :	Gray White

EM Proximity Reader (R30)

http://www.elatac.com

EM Proximity Reader (wiegand) is a weather proof contactless proximity card reader. The reader adopts the widely recognized EM technology. It provides high reliability, fast response time and low power consumption for a wide range access control system. In build in bi-color LED and Buzzer to provide visible alert for users. The wiegand interface protocol interface compatible with all standard access control system.





General Features:

- Wiegand 26, 34 and 44 bits outputs are available
- Bi-color LED (Red, Green) Indicator
- Build-in buzzer
- Up to 100mm card read operation range
- Fast verification time < 0.2 sec.
- With CPU watch dog function to prevent malfunction

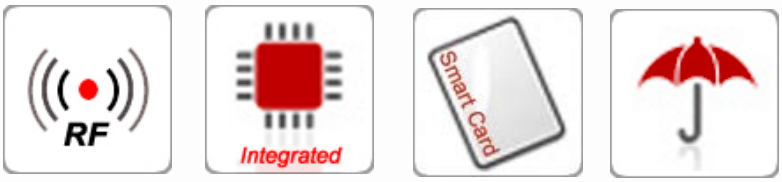
Specification:

Power Supply :	12VDC, 100mAmax
Read Range :	≥ 100 mm
Transmit Frequency :	125KHz
Compatible Card :	EM series Proximity Card
Operating Temperature :	0°C to + 50°C
Control Format :	Wiegand 26bits
Dimension :	114 x 74 x 17 mm
Color :	Black or Gray White

EM Proximity Reader (R40A)

http://www.elatac.com

EM Proximity Reader (wiegand) is a weather proof contactless proximity card reader. The reader adopts the widely recognized EM technology. It provides high reliability, fast response time and low power consumption for a wide range access control system. In build in bi-color LED and Buzzer to provide visible alert for users. The wiegand interface protocol interface compatible with all standard access control system.



General Features:

- Wiegand 26, 34 outputs are available
- Bi-color LED (Red, Blue) Indicator
- Build-in buzzer
- Up to 100mm card read operation range
- Fast verification time < 0.2 sec.
- With CPU watch dog function to prevent malfunction

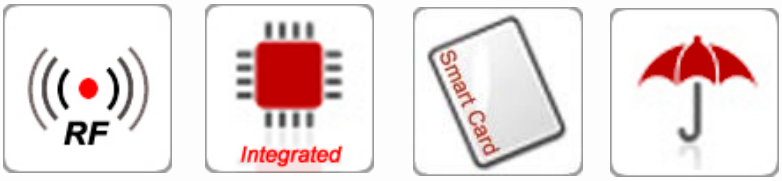
Specification:

Power Supply :	12VDC, 100mA max
Read Range :	≥ 100 - 180 mm
Transmit Frequency :	125KHz
Compatible Card :	EM series Proximity Card/tag
Operating Temperature :	0°C to + 50°C
Control Format :	Wiegand 26bits
Dimension :	88 x 88 x 18 mm
Color :	Black or White

EM Proximity Reader (R40K)

http://www.elatac.com

EM Proximity Reader with keypad (wiegand) is a weather proof contactless proximity card reader. The reader adopts the widely recognized EM technology. It provides high reliability, fast response time and low power consumption for a wide range access control system. In build in bi-color LED and Buzzer to provide visible alert for users. The wiegand interface protocol interface compatible with all standard access control system.



General Features:

- Wiegand 26, 34 outputs are available
- Bi-color LED (Red, Blue) Indicator
- Build-in buzzer
- Up to 100mm card read operation range
- Fast verification time < 0.2 sec.
- With CPU watch dog function to prevent malfunction

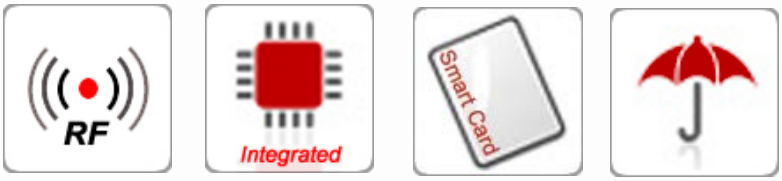
Specification:

Power Supply :	12VDC, 100mA max
Read Range :	≥ 100 - 180 mm
Transmit Frequency :	125KHz
Compatible Card :	EM series Proximity Card/tag
Operating Temperature :	0°C to + 50°C
Control Format :	Wiegand 26bits
Dimension :	88 x 88 x 18 mm
Color :	Black or White

Mifare Reader (R10)

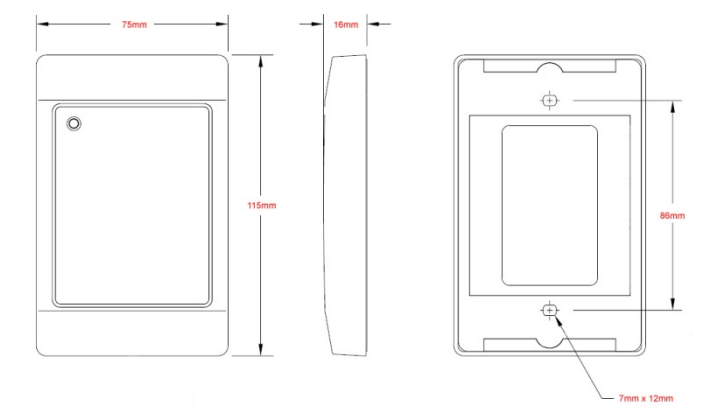
http://www.elatac.com

R10 Mifare Reader (wiegand) is a weather proof contactless smart card reader. The reader adopts the widely recognized Mifare technology. It provides high reliability, fast response time and low power consumption for a wide range access control system. In build in bi-color LED and Buzzer to provide visible alert for users. The wiegand interface protocol interface compatible with all standard access control system.



General Features:

- Wiegand 26, 34 or read block output are available
- Bi-color LED (Red, Green) Indicator
- Build-in buzzer
- Up to 50mm card read/write operation range
- Fast verification time < 0.2 sec.
- Store and Protect Card Key
- True anti-collision
- Key Store



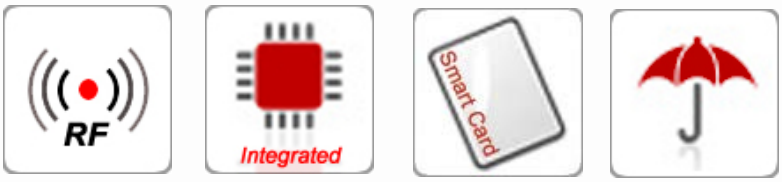
Specification:

Power Supply :	12VDC, 120mAmax
Read Range :	≥ 50 mm (Under standard 4 cores Mifare Smartcard)
Transmit Frequency :	13.56 MHz
Compatible Card :	ISO 14443 Type-A (Mifare)
Operating Temperature :	0°C to + 40°C
Control Format :	Wiegand 26 & 34bits
Dimension :	114 x 74 x 17 mm
Color :	Black, Gray and White

Mifare Reader with Keypads (R10K)

http://www.elatac.com

Mifare Reader with Keypads (wiegand) is a weather proof contactless smart card reader. The reader adopts the widely recognized Mifare technology. It provides high reliability, fast response time and low power consumption for a wide range access control system. In build in bi-color LED and Buzzer to provide visible alert for users. The wiegand interface protocol interface compatible with all standard access control system.



General Features:

- Wiegand 26, 34 or read block output are available
- 3x4 Keypads with Bell button
- Keypads to Wiegand Output
- Bi-color LED (Red, Green) Indicator
- Build-in buzzer
- Up to 50mm card read/write operation range
- Fast verification time < 0.2 sec.
- Store and Protect Card Key
- True anti-collision
- Key Store

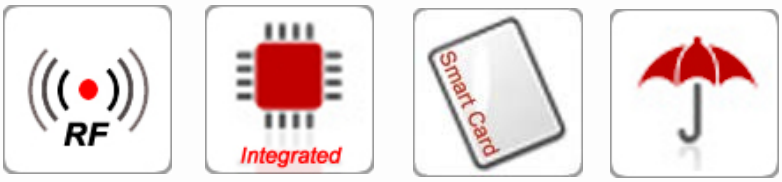
Specification:

Power Supply :	12VDC, 120mAmax
Read Range :	≥ 50 mm (Under standard 4 cores Mifare Smartcard)
Transmit Frequency :	13.56 MHz
Compatible Card :	ISO 14443 Type-A (Mifare)
Operating Temperature :	0°C to + 40°C
Control Format :	Wiegand 26 & 34bits
Dimension :	114 x 74 x 17 mm
Color :	Gray White

Mifare Reader (R18)

http://www.elatac.com

R18 Mifare Reader (wiegand) is a weather proof contactless smart card reader. The reader adopts the widely recognized Mifare technology. It provides high reliability, fast response time and low power consumption for a wide range access control system. Build in bi-color LED Light Pipe and Buzzer to provide visible alert for users. The wiegand interface can be compatible with all standard access control system.



General Features:

- Wiegand 26, 34 or read block output are available
- Bi-color LED (Red, Green) Indicator
- Build-in buzzer
- Up to 50mm card read/write operation range
- Fast verification time < 0.2 sec.
- Store and Protect Card Key
- True anti-collision
- Key Store

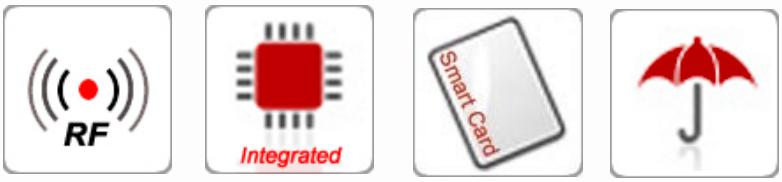
Specification:

Power Supply :	12VDC, 120mAmax
Read Range :	≥ 50 mm (Under standard 4 cores Mifare Smartcard)
Transmit Frequency :	13.56 MHz
Compatible Card :	ISO 14443 Type-A (Mifare)
Operating Temperature :	0°C to + 40°C
Control Format :	Wiegand 26 & 34bits
Dimension :	85 x 85 x 22 mm (WxHxD)
Color :	Black and White

EM Reader (R32)

http://www.elatac.com

R23 EM Reader (wiegand) is a weather proof contactless proximity card reader. The reader adopts the widely recognized EM technology. It provides high reliability, fast response time and low power consumption for a wide range access control system. In build in bi-color LED and Buzzer to provide visible alert for users. The wiegand interface protocol interface compatible with all standard access control system.



General Features:

- Wiegand 26 outputs
- Triple LED (Red, Yellow, Green) Indicator
- Build-in buzzer
- Up to 150mm card read operation range
- Fast verification time < 0.2 sec.
- With CPU watch dog function to prevent malfunction

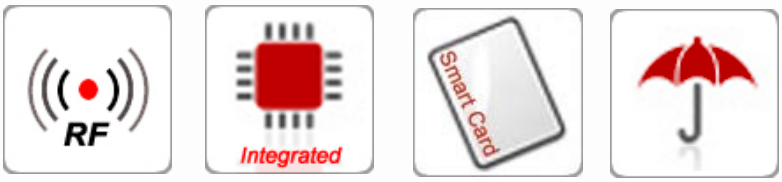
Specification:

Power Supply :	12VDC, 100mAmax
Read Range :	≥ 100 mm
Transmit Frequency :	125KHz
Compatible Card :	EM series Proximity Card
Operating Temperature :	0°C to + 50°C
Control Format :	Wiegand 26bits
Dimension :	122 x 46 x 23 mm (Model: R32A) 122x76x23mm(Model: R32B) 108×88×32mm (Model: R32K)
Color :	Black

Mifare Reader (R16)

http://www.elatac.com

R16 Mifare Reader (wiegand) is a weather proof contactless smart card reader. The reader adopts the widely recognized Mifare technology. It provides high reliability, fast response time and low power consumption for a wide range access control system. In build in bi-color LED and Buzzer to provide visible alert for users. The wiegand interface protocol interface compatible with all standard access control system.



General Features:

- Wiegand 26, 34 or read block output are available
- Bi-color LED (Red, Green) Indicator
- Build-in buzzer
- Up to 50mm card read/write operation range
- Fast verification time < 0.2 sec.
- Store and Protect Card Key
- True anti-collision
- Key Store

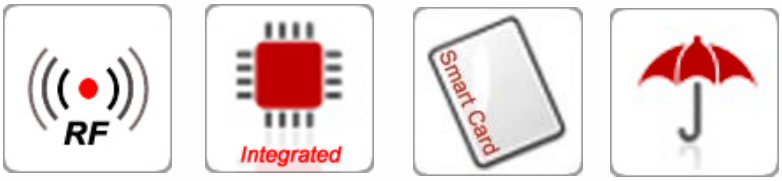
Specification:

Power Supply :	12VDC, 120mAmax
Read Range :	≥ 40 mm (Under standard 4 cores Mifare Smartcard)
Transmit Frequency :	13.56 MHz
Compatible Card :	ISO 14443 Type-A (Mifare)
Operating Temperature :	0°C to + 40°C
Control Format :	Wiegand 26 & 34bits
Dimension :	80 x 43 x 16 mm (Model: R16A) 86 x 86 x 18mm (Model: R16B)
Color :	Black

Mifare Reader (R15)

http://www.elatac.com

R15 Mifare Reader (wiegand) is a weather proof contactless smart card reader. The reader adopts the widely recognized Mifare technology. It provides high reliability, fast response time and low power consumption for a wide range access control system. In build in bi-color LED and Buzzer to provide visible alert for users. The wiegand interface protocol interface compatible with all standard access control system.



General Features:

- Wiegand 26, 34 or read block output are available
- Bi-color LED (Red, Green) Indicator
- Build-in buzzer
- Up to 50mm card read/write operation range
- Fast verification time < 0.2 sec.
- Store and Protect Card Key
- True anti-collision
- Key Store

Specification:

Power Supply :	12VDC, 120mAmax
Read Range :	≥ 50 mm (Under standard 4 cores Mifare Smartcard)
Transmit Frequency :	13.56 MHz
Compatible Card :	ISO 14443 Type-A (Mifare)
Operating Temperature :	0°C to + 40°C
Control Format :	Wiegand 26 & 34bits
Dimension :	80 x 42 x 12 mm
Color :	Gray

LCD EM Reader

http://www.elatac.com

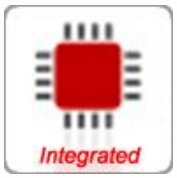
RK31/RL31 LCD EM Reader is build for Time Attendance System. The LCD module is used to display the Date &Time information and also card status. The reader clock will auto synchronize with the system clock. The readers build in 3x4keypads for Door Code, Card and Card + PIN access also build in LED's and Buzzer to provide visible alert for users.

The reader adopts the widely recognized Mifare technology. It provides high reliability, fast response time and low power consumption for a wide range access control system. The RS485 Connection provide up to 1.2Km communication distance.

Model: RK31(K)

Model: RL31

Model: RL31(W)



General Features:

- 2x16 LCD Display with Backlight
- 3x4 Keypads with Backlight(Optional)
- LEDs (Red, Green) Indicator
- Build-in buzzer
- Up to 100mm card read/write operation range
- Fast verification time < 0.2 sec.
- RS485 Connection
- Lightning and Surge Protection

Signal	Color
12V	RED
GND	BLACK
RS485+	ORANGE
RS485-	WHITE

Specification:

Power Supply :	12VDC, 150mAmax
Read Range :	≥ 100 mm
Transmit Frequency :	125 MHz
Compatible Card :	EM Proximity Card
Operating Temperature :	0°C to + 40°C
Control Format :	RS485 (9600,8,N,1)s
Dimension :	96 x 123 x 34 mm
Color :	Black and White

LCD Mifare Reader

http://www.elatac.com

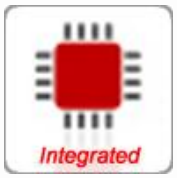
RK11/RL10 LCD Mifare Reader is build for Time Attendance System. The LCD module is used to display the Date &Time information and also card status. The reader clock will auto synchronize with the system clock. The readers build in 3x4keypads for Door Code, Card and Card + PIN access also build in LED's and Buzzer to provide visible alert for users.

The reader adopts the widely recognized Mifare technology. It provides high reliability, fast response time and low power consumption for a wide range access control system. The RS485 Connection provide up to 1.2Km communication distance.

Model: RK11(K)

Model: RL10

Model: RK11(W)



General Features:

- 2x16 LCD Display with Backlight
- 3x4 Keypads with Backlight(Optional)
- LEDs (Red, Green) Indicator
- Build-in buzzer
- Up to 70mm card read/write operation range
- Fast verification time < 0.2 sec.
- Store and Protect Card Key
- True anti-collision
- Key Store
- RS485 Connection
- Lightning and Surge Protection

Signal	Color
12V	RED
GND	BLACK
RS485+	ORANGE
RS485-	WHITE

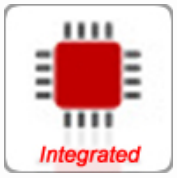
Specification:

Power Supply :	12VDC, 150mAmax
Read Range :	≥ 60 mm (Under standard 4 cores Mifare Smartcard)
Transmit Frequency :	13.56 MHz
Compatible Card :	ISO 14443 Type-A (Mifare)
Operating Temperature :	0°C to + 40°C
Control Format :	RS485 (9600,8,N,1)s
Dimension :	96 x 123 x 34 mm
Color :	Black and White

Booking Reader *(RL10BU)*

http://www.elatac.com

RL10BU Booking Reader is build on Time Attendance System. The 2x16 LCD display is used to display the Date &Time information and also card status. The readers build in 3 keypads for select Check-In, Extend and Check-Out function. The reader adopts the widely recognized Mifare technology. It provides high reliability, fast response time and low power consumption for a wide range access control system. In build in LED's and Buzzer to provide visible alert for users. The RS485 Connection provide up to 1.2Km communication distance.



General Features:

- 2x16 LCD Display with Backlight
- 3 Keypads with Backlight
- LEDs (Red, Green) Indicator
- Build-in buzzer
- Up to 70mm card read/write operation range
- Fast verification time < 0.2 sec.
- Store and Protect Card Key
- True anti-collision
- Key Store
- RS485 Connection
- Lightning and Surge Protection

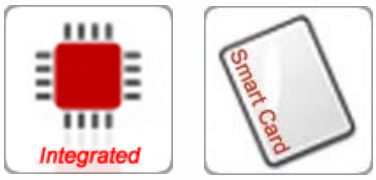
Specification:

Power Supply :	12VDC, 150mAmax
Read Range :	≥ 70 mm (Under standard 4 cores Mifare Smartcard)
Transmit Frequency :	13.56 MHz
Compatible Card :	ISO 14443 Type-A (Mifare)
Operating Temperature :	0°C to + 40°C
Control Format :	RS485 (9600,8,N,1)s
Dimension :	96 x 123 x 34 mm
Color :	Black and White

LCD Contact Reader *(RK20)*

http://www.elatac.com

RK20 LCD Contact Reader is an ISO7816 Standard Contact type Smart Card Reader. It designs for high security authentication between smart card and reader to grand access for the door. The reader builds in 4x16 LCD display to show the Date &Time information and also card/door status. It also provides keypads to allow multi-level door access, include Door Code, Card Only and Card + PIN access.



General Features:

- 4x16 LCD Display with Backlight
- 3x4 Keypads with Backlight
- Dual LED (Red, Green) Indicator
- Build-in buzzer
- Support JAVA, Multos & ISO7816 Standard Card
- Provide DES & RSA Data Encryption and Mutual Authentication Process
- Store and Protect Card Key
- RS485 Connection
- Lightning and Surge Protection

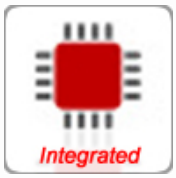
Specification:

Power Supply :	12VDC, 150mAmax
Card Type:	Java, Multos & ISO7816 Standard
Operating Temperature :	0°C to + 40°C
Control Format :	RS485 (9600,8,N,1)s
Dimension :	162 x 114 x 34 mm
Color :	Black, White

Middle Range Integrated Reader

http://www.elatac.com

R6012 ISO18000-6B RFID Reader is design for middle range distance identification for Carpark, Library, Ware House application and etc. The reader provides different communication ports and development sample code for further development. It provides up to 3 Meter read operation and 2 Meter Write Operation.



General Features:

- Provide window API.
- High speed micro-processor controlled, running steadily
- Support initiative, passive, trigger mode
- Tags with more than 120Km/h speed can be identified
- Firmware can be upgraded easily by RS232

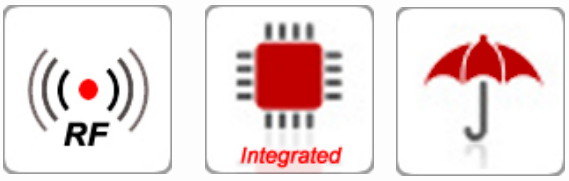
Specification:

Reader-Tag Protocol	ISO18000-6B, EPC Class1 Gen2
Antenna	Integrated antenna, Circular Polarization
Frequency	Fixed Frequency / FHSS, optional frequency band: - USA standard 902-928MHz;EU standard 865-868MHz; CN standard 920-925MHz
Communication	RS232/RS485/USB/Wiegand26/34/Trigger Input
Identify Tag Range	Detect range to 3M, depended on environment and tag
RF Output	Less than 30dBm, Software Programmable
Software Support	Provide Windows API, Demo sample software(With source Code)
Power Supply	DC 12V supply, less than 1A
Dimension	260x260x40 mm
Weight	2.0 Kg
Work Mode	Auto-detecting initiative, passive trigger mode
Upgrade	Firmware can be upgraded easily RS-232

Long Range Integrated Reader

http://www.elatac.com

R6011 ISO18000-6B RFID Reader is design for long distance identification for Carpark, Library, Ware House application and etc. The reader provides different communication ports and development sample code for further development. It provides up to 10Meter reading range and up to 6Meter Write Operation.



General Features:

- Provide window API.
- High speed micro-processor controlled, running steadily
- Support initiative, passive, trigger mode
- Tags with more than 120Km/h speed can be identified
- Firmware can be upgraded easily by RS232

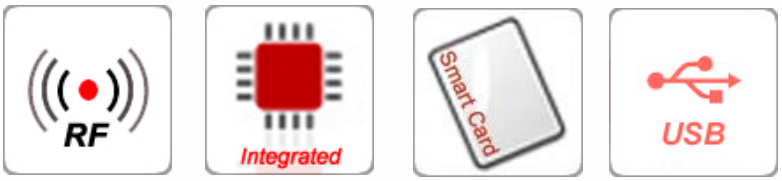
Specification:

Reader-Tag Protocol	ISO18000-6B, EPC Class1 Gen2
Antenna	Integrated antenna, Horizontal Polarization
Frequency	Fixed Frequency / FHSS, optional frequency band: - USA standard 902-928MHz;EU standard 865-868MHz; CN standard 920-925MHz
Communication	RS232/RS485/USB/Wiegand26/34/Trigger Input
Identify Tag Range	Detect range to 10M, depended on environment and tag
RF Output	Less than 30dBm, Software Programmable
Software Support	Provide Windows API, Demo sample software(With source Code)
Power Supply	DC 12V supply, less than1A
Dimension	455x455x40 mm
Weight	4.0 Kg
Work Mode	Auto-detecting initiative, passive trigger mode
IP Class	IP65
Upgrade	Firmware can be upgraded easily RS-232

USB Mifare Reader (R21Auto)

http://www.elatac.com

R21 USB Mifare Reader is a desktop smart card reader and adopts the widely recognized Mifare technology. It has the Auto-Read function which is reading the presented Card ID and put it into the connected computer. It provides high reliability, fast response time and low labor cost for inputting a large amount of Mifare Card ID. The readers build in bi-color LED and Buzzer to provide visible indication for users. The USB connection support most operation system including Linux, Windows performs (Win98, ME, 2000, XP, CE, vista and etc) and MAC PC. Two different versions are on shelf: 10digit and HEX format.



General Features:

- USB connection
- Auto-Read function
- 10 digit output or HEX output
- Bi-color LED (Red, Green) Indicator
- Build-in buzzer
- Up to 50mm card read operation range
- True anti-collision

Specification:

Power Supply :	By USB (5VDC, 100mAmax)
Read Range :	≥ 50 mm (Under standard 4 cores Mifare Smartcard)
Transmit Frequency :	13.56 MHz
Compatible Card :	ISO 14443 Type-A (Mifare)
Operating Temperature :	0°C to + 40°C
Control Format :	USB 1.0
Dimension :	110x 82 x 25 mm
Color :	Black

I/O board *(CT51)*

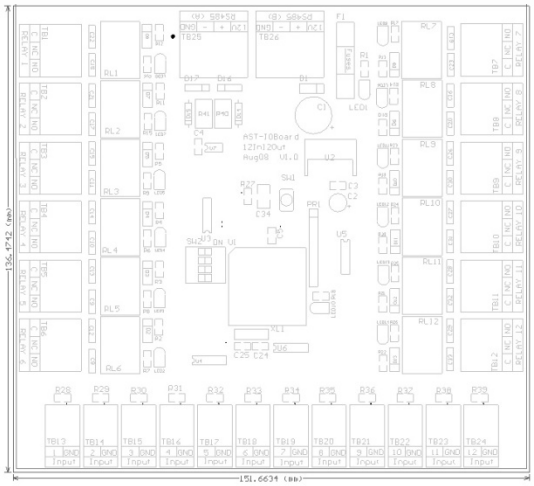
http://www.elatac.com

I/O board (12Out & 12 In) is an interface unit that provide Alarm Monitoring and Control. The I/O Board provides address selection to allow linking up to 8 Interface Boards in the same RS485 Network. It can provide up to 96 Inputs and Outputs Control within the same RS485 network. All the inputs provide 4states (supervisor mode) detection. And the output provides LED indication for easy monitoring.

Build in Lightning and Surge protection to reduce the failure rate.	Integrated circuit design to reduce board size and improve the power consumption

General Features:

- 12 Dry Contact Outputs
- 12 Supervisor Inputs
- LED's Indication for Relay On/Off
- Polling & Power LED's Indication
- RS485 provide Surge & Lightning protection
- Fuse Protection
- Plug-in screw terminals reduce installation time



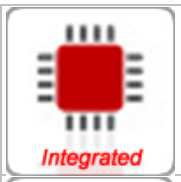
Specification:

Power Supply :	12VDC, 200mAmax
I/O (Input/Output)	12 Inputs 12 x Relay (C, NC, NO)
Operating Temperature :	0°C to + 40°C
Control Format :	RS485 (9600bps 8,N,1)
Dimension :	Board: 137(W) x 152(H) x 30(D) mm Enclosure: 210(W) x 250(H) x 70 (D)mm

Wiegand Controller *(CT10)*

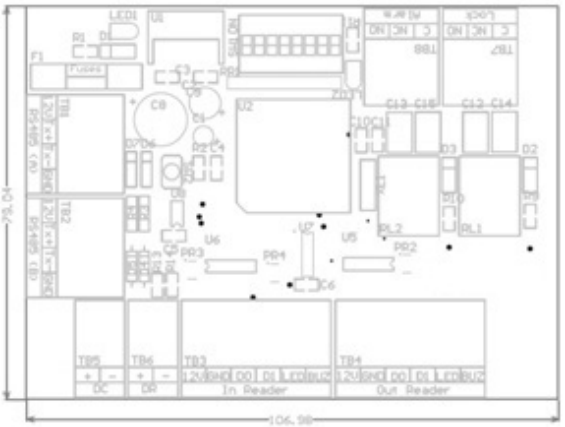
http://www.elatac.com

CT10 Wiegand Controller is an interface module to creates the connectivity between iMS-Panel and door accessories (including readers, sensor, release button, lock, alarm and etc). It provides full features door control with lower wiring costs. The control will collect all the hardware status and return to the iMS-Panel via RS485 network. The iMS-Panel will make decision according to the administrator setting to unlock the door or go for other control

	Support different reader formats (Proximity, Smart Card, RFID and etc)		Integrated circuit design to reduce board size and improve the power consumption
	Support multi-lengths card ID from 24 – 48 bits(Standard) and dip switch setting for up to 64bits		Build in Lightning and Surge protection to reduce the failure rate.

General Features:

- Two Wiegand Input (In & Out Reader)
- Auto convert Card ID
- Two input & Two output ports
- Long Communication Distance(1.2Km)
- RS485 Surge & Lightning Protection
- Watch dog protection
- Status LED for easy troubleshoot
- Plug-in screw terminals reduce installation time



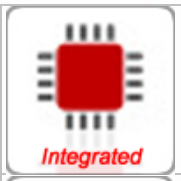
Specification:

Power Supply :	12VDC, 100mAmax
I/O (Input/Output)	2 x Reader inputs (Wiegand 24-64 bits) 2 x Relay (C, NC, NO) Door Lock output, Alarm relay output 1 x Door Release Button input 1 x Door Sensor input
Operating Temperature :	0°C to + 40°C
Control Format :	RS485 (9600bps 8,N,1)
Dimension :	Board: 107 x 80 x 30 mm Enclosure: 155(W) x 155(H) x 55(D)mm

485 Controller (CT11)

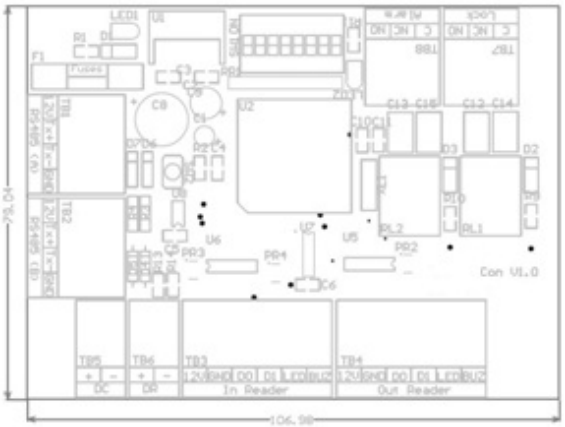
http://www.elatac.com

485 Controller is an interface module to creates the connectivity between -Panel and door accessories (including readers, sensor, release button, lock, alarm and etc). It provides full features door control with lower wiring costs. The control will collect all the hardware status and return to the -Panel via RS485 network. The -Panel will make decision according to the administrator setting to unlock the door or go for other control.

	Support different reader formats (Proximity, Smart Card, RFID and etc)		Integrated circuit design to reduce board size and improve the power consumption
	Support multi-lengths card ID for 12digits via RS485 Connection		Build in Lightning and Surge protection to reduce the failure rate.

General Features:

- RS485 connection for readers (In & Out Reader)
- Auto convert Card ID
- Two input & Two output ports
- Long Communication Distance(1.2Km)
- RS485 Surge & Lightning Protection
- Watch dog protection
- Status LED for easy troubleshoot
- Plug-in screw terminals reduce installation time



Specification:

Power Supply :	12VDC, 100mAmax
I/O (Input/Output)	1 x RS485 Reader port for up to 1.2Km 2 x Relay (C, NC, NO) Door Lock output, Alarm relay output 1 x Door Release Button input 1 x Door Sensor input
Operating Temperature :	0°C to + 40°C
Control Format :	RS485 (9600bps 8,N,1)
Dimension :	Board: 107 x 80 x 30 mm Enclosure: 155(W) x 155(H) x 55(D)mm

Panel (TCP/IP) (P10)
High Capacity Panel (P11)

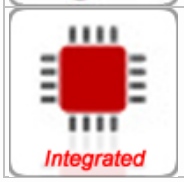
http://www.elatac.com

P10/P11 Panel is an intelligent, modular devices designed for different management application. The panel has a streamlined design that features the latest technology and a minimum of circuit boards to provide a highly dependable, cost-effective solution for access control, lift control, car park control and time attendance system.

The panel is an embedded system equipped with a TCP/IP connection for remote update and monitoring. Through this TCP/IP connection, word wide group company can be easy control and monitor via internet.

Panel(TCP/IP) Model: P10

High Capacity Panel Model: P11

	Support different reader formats (Proximity, Smart Card, RFID and etc)		Embedded TCP/IP connection allow remote monitoring via Internet
	Integrated circuit design to reduce board size and improve the power consumption		Support multi lengths card number from 24 – 48 bits(Standard) and can be upgrade to more than 64bits

General Features:

- Support 12,000 users(P10; Stand version) &
- 1,000,000 users (P11; High Capacity Version)
- 128 Door Group Setting
- 32 Holiday Periods Setting
- Build in lithium backup battery (~3Year)
- LEDs indication for monitoring each doors
- Support 8 Controller via RS485 network (1.2Km)
- Fast restart time (2second)
- Support 12,000 transactions(P10; Stand version)
- 1,000,000 transactions (P11; High Capacity Version)
- 128 Time Zones Setting
- Watch dog protection
- Real Time Clock
- Support TCP/IP 10Mbps connection
- Local intelligent for shunt down and restart records
- RS485 Surge & Lightning Protection

Specification:

Power Supply :	12VDC, 150mAmax
Operating Temperature :	0°C to + 40°C
Control Format :	TCP/IP 10Mbps
Support Door :	Controllers x 8
Setup Port :	RS232 (19200, 8, N,1)
Dimension :	95x 85 x 25 mm

12V/5A Power Supply (PS01)

http://www.elatac.com

The 12V/5A Power Supply (Model: PS01) is a power supply provides constant Voltage Output and Battery Charger function. It is designed for security system for uninterrupted power supply. The power supply provides main power loss relay output for external device monitoring.

General Features:

- Power Input : 220-250Vac
- Power Output : 12-13.5V 5A
- Operating Frequency : 50Hz
- Operating Temperature : 0°C to + 50°C
- Metal case with lock

Physical Dimesion:

- 280 x 280 x 76 mm

EM4100-Proximity Tag (EM10)

125KHz, 64bit read only contactless identification device

http://www.elatac.com

The EM4100 PROX Tag (previously named H4100) is a CMOS integrated circuit for use in electronic Read Only RF Transponders. The circuit is powered by an external coil placed in an electromagnetic field, and gets its master clock from the same field via one of the coil terminals. By turning on and off the modulation current, the chip will send back the 64 bits of information contained in a factor y pre-programmed memory array. The programming of the chip is performed by laser fusing of polysiliconlinks in order to store a unique code on each chip. The EM4100 has several metal options which are used to define the code type and data rate. Data rates of 64, 32 and 16 periods of carrier frequency per data bit are available. Data can be coded as Manchester, Biphaseor PSK. Due to low power consumption of the logic core, no supply buffer capacitor is required. Only an external coil is needed to obtain the chip function. A parallel resonance capacitor of 74 pF is also integrated.

General Features:

- 64 bit memory array laser programmable
- Several options of data rate and coding available
- On chip resonance capacitor
- On chip supply buffer capacitor
- On chip voltage limiter
- Full wave rectifier on chip
- Large modulation depth due to a low impedance modulation device
- Operating frequency 100 -150 kHz
- Very small chip size convenient for implantation
- Very low power cons

Applications:

- Logistic automation
- Industrial transponder
- Access control
- Anti-counterfeiting

Physical Dimesion:

- ISO 7816 standard

Mifare classic 1K/4K RFID Tag (MIF10)

http://www.elatac.com

MIFARE has been selected as the most successful contactless smart card technology. In addition, MIFARE is the perfect solution for applications, like Public transportation, Access management, Event ticketing and Gaming. MIFARE contactless smart card is developed and manufactured by NXP Semiconductors (founded by PHILIPS). Each card has a unique serial number. MIFARE complies with the international standard ISO/IEC 14443 Type A, which is used in more than 80% of all contactless smart cards today.

General Features:

- *Unique serial number (4 Byte)*
- *2 x 48 bit keys per sector for key hierarchy*
- *Access conditions free configurable based on 2 level key hierarchy*
- *Read/Write capability*
- *Number of single write operations: 100,000*
- *Data retention: 10 years*
- *Dimension: CR80 standard credit card size (86 x 54mm) & Key Range (40 x 32mm)*
- *Material: PVC*

(Mifare 1k Tag)

- *1 Kbyte EEPROM (768 Byte free available)*
- *16 securely separated sectors supporting multi-application*
- *Each sector consists 4 blocks with a length of 16 Byte*

(Mifare 4k Tag)

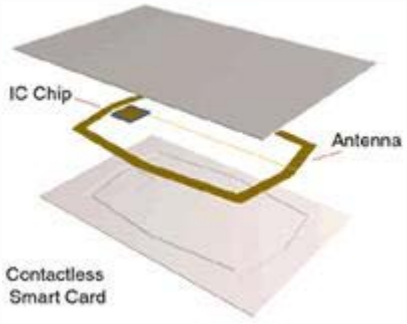
- *4 Kbyte EEPROM (3480 Byte free available)*
- *40 securely separated sectors supporting multi-application:*
  - *32 sectors consist of 4 blocks with a length of 16 Byte*
  - *8 sectors consist of 16 blocks with a length of 16 Byte*

EM4100-Proximity Card

125KHz, 64bit read only contactless identification device

http://www.elatac.com

The EM4100 (previously named H4100) is a CMOS integrated circuit for use in electronic Read Only RF Transponders. The circuit is powered by an external coil placed in an electromagnetic field, and gets its master clock from the same field via one of the coil terminals. By turning on and off the modulation current, the chip will send back the 64 bits of information contained in a factor y pre-programmed memory array. The programming of the chip is performed by laser fusing of polysiliconlinks in order to store a unique code on each chip. The EM4100 has several metal options which are used to define the code type and data rate. Data rates of 64, 32 and 16 periods of carrier frequency per data bit are available. Data can be coded as Manchester, Biphaseor PSK. Due to low power consumption of the logic core, no supply buffer capacitor is required. Only an external coil is needed to obtain the chip function. A parallel resonance capacitor of 74 pF is also integrated.



General Features:

- 64 bit memory array laser programmable
- Several options of data rate and coding available
- On chip resonance capacitor
- On chip supply buffer capacitor
- On chip voltage limiter
- Full wave rectifier on chip
- Large modulation depth due to a low impedance modulation device
- Operating frequency 100 -150 kHz
- Very small chip size convenient for implantation
- Very low power cons

Applications:

- Logistic automation
- Industrial transponder
- Access control
- Anti-counterfeiting

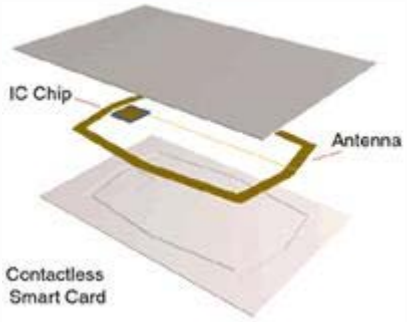
Physical Dimesion:

- ISO 7816 standard

Mifare 1K/4K Card

http://www.elatac.com

MIFARE has been selected as the most successful contact less smart card technology. In addition, MIFARE is the perfect solution for applications, like Public transportation, Access management, Event ticketing and Gaming. MIFARE contactless smart card is developed and manufactured by NXP Semiconductors (founded by PHILIPS). Each card has a unique serial number. MIFARE complies with the international standard ISO/IEC 14443 Type A, which is used in more than 80% of all contactless smart cards today.



General Features:

- Unique serial number (4 Byte)
- 2 x 48 bit keys per sector for key hierarchy
- Access conditions free configurable based on 2 level key hierarchy
- Read/Write capability
- Number of single write operations: 100.000
- Data retention: 10 years
- Dimension: CR80 standard credit card size (86 x 54mm)
- Material: PVC

(Mifare 1k Card)

- 1 Kbyte EEPROM (768 Byte free available)
- 16 securely separated sectors supporting multi-application
- Each sector consists 4 blocks with a length of 16 Byte

(Mifare 4k Card)

- 4 Kbyte EEPROM (3480 Byte free available)
- 40 securely separated sectors supporting multi-application:
- 32 sectors consist of 4 blocks with a length of 16 Byte
- 8 sectors consist of 16 blocks with a length of 16 Byte

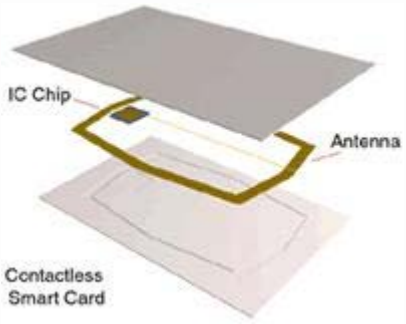
＊ Offset Card Printing Services

To meet the customer needs, we also provide customized Card Printing Services.

PVC UHF RFID Card (LTH01)

865-868MHz read only contactless card

http://www.elatac.com



General Features:

- PVC UHF RFID Card
- Model: AST-LTH01
- ISO18000-6B/EPC Gen2
- Operating frequency 865-868MHz
- Very small chip size convenient for implantation
- Very low power cons

Applications:

- Parking facilities / Garage
- Logistic automation
- Industrial transponder
- Access control
- Anti-counterfeiting

Physical Dimesion:

- 54mm x 86mm x 0.8mm

Cardholder (H01)

Plastic holder for contactless cards

http://www.elatac.com

General Features:

Model: H01

- Material: ABS plastic
- Color: Gray White

Physical Dimesion:

- 90mm x 60mm

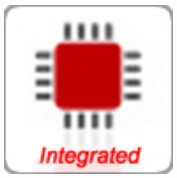
Code Lock *(K101)*

http://www.elatac.com

Metal Stand Alone Access Control Keypad K101

The code lock uses the latest microprocessor technology to operate door strikes and security systems that require a momentary (timed) or latching dry contact closure.
All programming is done through the keypad. Codes and operating parameters are stored within the microprocessor and can not be lost due to power failure.

The K101 can store 1000 4 digit codes. Each 4 digit code has 10,000 possible combinations. The unit has one relay with 5 Amp contacts.



- Exquisite designs with non-masking Metal shell.
- Operates stand alone.
- Waterproof and weather resistant functions
- keystroke backlight
- Application:luxurious office building,bank,Prisons
- Change Codes 1 master,1000 users
- Door open detection
- Door relay time 00-99 seconds
- Alarm time 00-99 minutes
- Electric Lock
- External Bell
- External Push Switch
- Magnetic Contacts
- Alarm
- Non volatile Eeprom memory

Specification:

Power Supply :	12VDC
Dimension :	W82mm*L128mm*H28mm