Access Control
Single Door Access Controllers

PRODUCT CATALOG
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2012-2013

ACCESS
CONTROL
Datasheet
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F510/C

Metal Shell Fingerprint Access Control

Vandal-proof
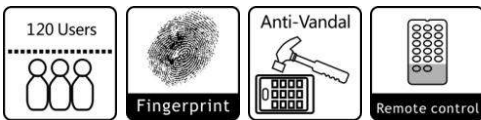
Technical Specification

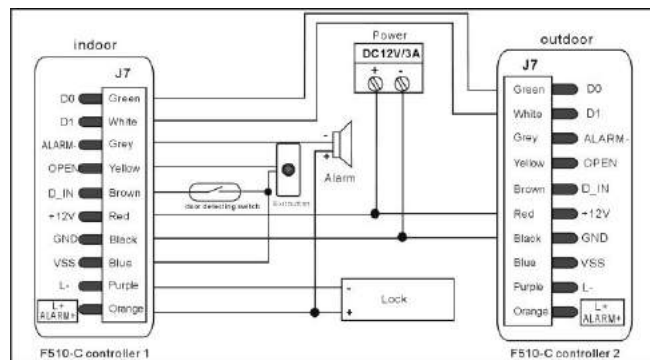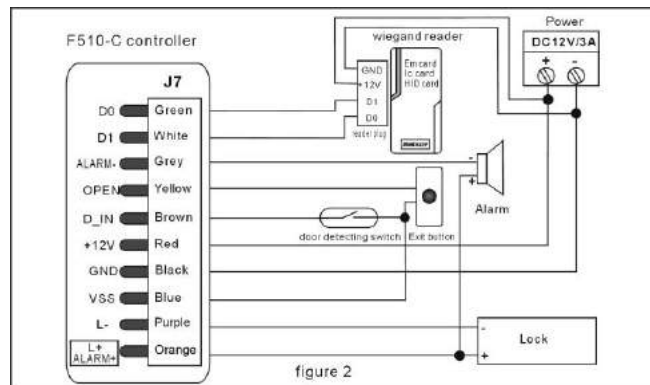| Model NO.	F510
Metal Shell Fingerprint Access Control	
Supply Voltage	12VDC±10%
Sleeping Current	<20mA
Stay Current	<90mA
Temperature	-15℃-60℃
Humidity	20%RH-95%RH
Memory capacity	2160
Fingerprint capacity	160
Card capacity	2000
Card type	125KHZ ID card
Card reading distance	50 ± 30 mm
Lock output load capacity	20A
Alarm output load capacity	20A
Resolution	450 DPI
Fingerprint input time	<1S
Identification time	<1S
FAR	<0.001%
FRR	<0.1%
Dimensions	110L*70W*30H(mm)
N/W	500g
G/W	800g

About

F510/C is the new member of F Series Standalone Fingerprint access control, as traditional it is in metal shell, anti-vandal, supports fingerprint, besides, F510C support RFID card (125KHZ EM card) and wiegand interface. The high security and more powerful feature make it an ideal choice for door access.

User capacity 2160, including 160 fingerprint users and 2000 RFID card users. With the flexible user capacity, it is suitable to be installed from small house such as personal rooms, shops, office to public place such as large factories, companies.

By Remote control or Master card for programming, it is so user friendly that anyone can use it.

Key Features

- ✓ Metal shell, anti-vandal, Fireproof, Shockproof.
- ✓ F510: 120 fingerprints, F510C: 160 fingerprints & 2000 Cards
- ✓ Remote infrared programmer
- ✓ Lock release relay, NO and NC, 12 Volt DC System
- ✓ F510C Wiegand26.
- ✓ Programmable lock release time
- ✓ Sleep mode to save energy
- ✓ Built in PIR to wake up the device
- ✓ Working temperature: -20-55
- ✓ Two year warranty;
- ✓ One second activation time, after placing finger on reader
- ✓ Size: 110mm*70m*30mm

Rain Shield

figure 2

F510C (same plus)

- 160 Finger, 2000 Proximity Card
- Wiegand 26, (Connect to C520/NT)

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C520/NT
Metal Shell Proximity Card & Pin Code Access Control

Vandal-proof

1,000 Users | Card | Anti-Vandal | 4-6 Digits PIN

About

The C520 access control keypad and card reader uses the latest microprocessor technology to operate control the opening and closing functions of automatic gates, electric strikes, and most security systems that require a momentary (timed) or latching dry contact.

All programming is done through the keypad. Codes and operating parameters are stored within the microprocessor and cannot be lost due to power failure.

The C520 can store 1000 proximity cards and 1000 users with 4 digit password codes. Each 4 digit password code has 10,000 possible combinations.
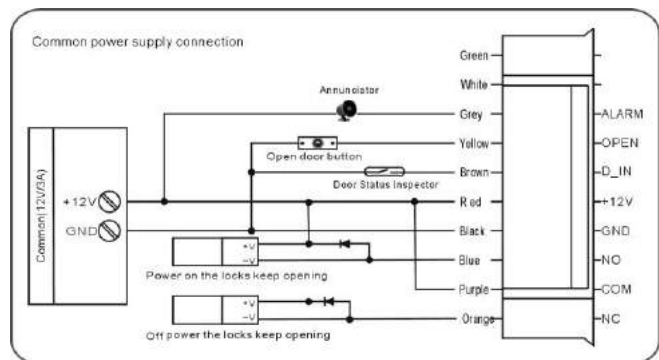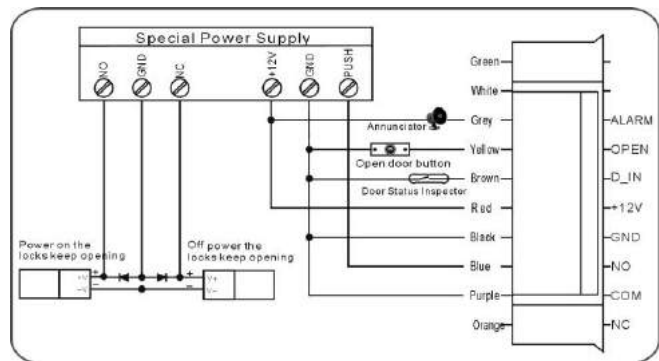
Key Features

- ✓ Metal shell, anti-vandal, Fireproof, Shockproof.
- ✓ C520: 1000 User, C520NT: 1000 User, 1000 Records, Wiegand26, RS485
- ✓ Can be used as only keypad;
- ✓ Support password, card, card+ password
- ✓ Can be used as master controller or slave reader
- ✓ WG : wiegand output (Optional C520/WG)
- ✓ Very low power consumption(20mA)
- ✓ Anti-magnetic & lock output current short protect;
- ✓ So easy for connection of the lock: only 2 wires output, selecting lock type by programming menu;
- ✓ 2 pcs can be communicated; Double-door interconnected
- ✓ Full of 1000 users, recognizing speed <20ms.
- ✓ Size: 82mm x 128mm x 28mm.

Technical Specification

Model NO.	C520
Metal Shell Proximity Card & Pin Code Access Control	
DC Supply Voltage	Low voltage input 12Vdc unregulated
Current Consumption	100mA @ quiescent maximum
Door Relay:	3Amp 12Vdc
Alarm output load	150mA pull current
Memory	Nonvolatile EPROM memory
Codes	1 Master, 1000 cards and 1000 codes
Keypad	12 keys, 3 LED status indicators
Card Types	EM or EM compatible
Induction Distance	5-8cm
Wiring Connections	Electric lock Remote Request to Exit Door open detection External Alarm
Tamper Protection	Negative loop, normally closed
Keypad Housing	Metal
Operating Temperature	-10℃ to 60 ℃(14℉ to 140℉)
Dimensions	82mm x 128mm x 28mm
Weight	500g

Rain Shield

F510C (same plus)
- 160 Finger, 2000 Proximity Card
- Wiegand 26, (Connect to C520/NT)

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F580
Metal Shell Finger Print & Proximity Card Access Control (USB Cable)

Vandal-proof

Card — Anti-Vandal — Fingerprint

Technical Specification

Model NO.	F580
Metal Shell Finger Print & Proximity Card Access Control (USB Cable)	
DC Supply Voltage	Low voltage input 12Vdc unregulated
Current Consumption	100mA @ quiescent maximum
Door Relay:	3Amp 12Vdc
Alarm output load	150mA pull current
Memory	30,000 Transaction
Master	1 Master, Card or Finger Print
Capacity	200 Fingerprint, 100 Card
Card Types	EM or EM compatible
Induction Distance	5-8cm
Wiring Connections	Electric lock Remote Request to Exit Door open detection External Alarm
Tamper Protection	Negative loop, normally closed
Keypad Housing	Metal
Operating Temperature	-10℃ to 60 ℃(14℉ to 140℉)
Dimensions	120mm x 120mm x 35mm
Weight	900g

About

F580 is a terminal specified for access control.

With a robust and elegant metal case design, it is ideal for areas where only simple access control is required without management software.

The fingerprint sensor comes with a protective cover.
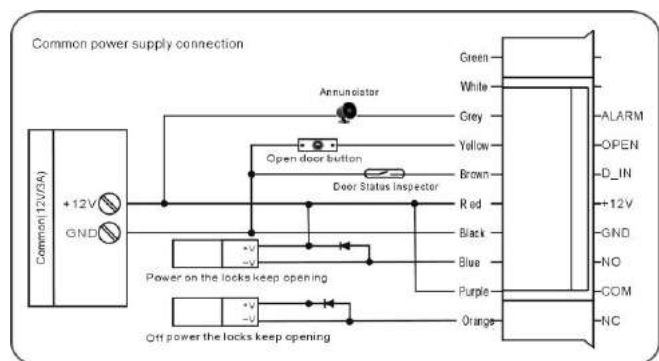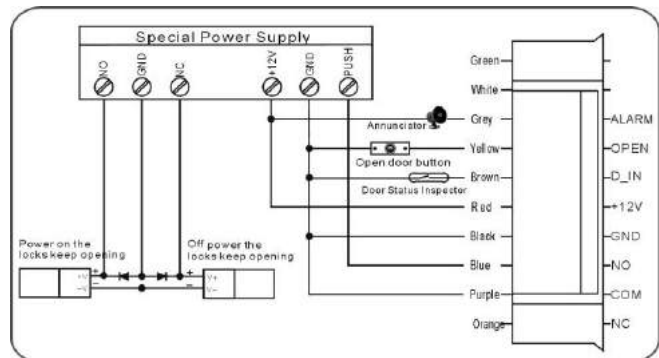Additionally, integrated in the terminal is a proximity card reader (EM).

Easy to use, the F580 incorporates 3 buttons to register, delete and for a doorbell.

Key Features

✓ Simple access control

✓ Incorporates high precision Somax Sensor for registering 1 fingerprint per user.

✓ Wiegand – Out to connect with external reader.

✓ Allows communication with PC through USB / RS-232

✓ Relay for door, alarm and push button.

✓ Fingerprint registration and access guided by audio prompt.

✓ Integrated Proximity Reader (EM) facilitates access by fingerprint or card.

✓ Stores up to 30.000 access registrations without PC download.

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AC900 Network Access Controller
Fingerprint, Proximity Card & Pin Code Network Access Controller

Network Access Controller

AC900 Network Access Controller

SOMAX AC900 series, a professional access control tool offers you the new experience with the innovation of combining the fingerprint verification and an optional function with RFID Card system. SOMAX AC900 series also provides security control alarm system to prevent any unauthorized dismantle of the reader.

With the features on the combination of fingerprint and card system in SOMAX AC900 series and together with the alarm system, any unauthorized entries or unwanted intruders can now be avoided to enhance the highest protection for your organization and premises.

Anti-scratch Fingerprint Sensor

Specification

Templates	2800
Transactions	100000
Matching	1:N up to 2800 templates
Verification	≤ 1 second
Ver. Type	FP, Card, Pin code (And/Or)
Identification	≤ 2 seconds
FRR	≤ 1%
FAR	≤ 0.0001%
LCD	4 lines, 16 characters each line Graphic Display LCD
Oper. Temp	105 F (0-42 C)
Relay Output	12V DC, 3A
Port	RS 232/RS 485 – Ethernet 10/100 - USB
Oper. Voltage	12V DC
Idle Current	60 mA
Oper. Current	450 mA
Length	7.3 inches / 185mm
Width	3.3 inches / 85mm
Depth	1.45 inches / 37mm

System Communication
for illustration only

Installation Diagram
for illustration only

Key Features

Fingerprint
Enrolled fingerprints are stored in the system and through the fingerprint reader; user can be verified with the presence of their genuine fingerprint.

RF Card
RFID Card system as an alternative verification method, a combination of fingerprint, proximity card and password identification methods are available in SOMAX AC900 series for user's comfort.

TCP/IP Method
SOMAX AC900 series installed with TCP/IP as a communicator between reader and computer that supports real-time data transfer for easy and efficient data management.

Smart Recognition Algorithm
Manage one-to-one (1:1) and one-to-many (1:N) verifications of maximum 3,000 templates. SOMAX AC900 series allows 360o rotation fingerprint placement with less than 2 seconds for identity authentication.

High performance CPU
32BIT Intel CPU for fast and sufficient process.

Linux O/S
Embedded with advanced Linux Operation System which can operate consecutively for 24 hours with reliable and stable performance.

Authentication
Multi-Verification methods of 15 different combinations with Fingerprint, Card with Password or ID with Password, or a combination of all to enhance security protection.

Wiegand in & out
Wiegand in & out communication with any third party readers or door access controllers
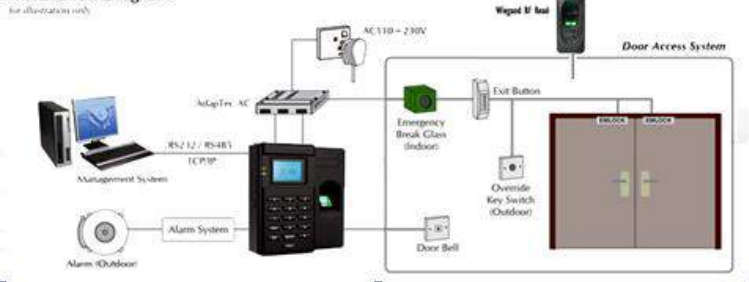
High speed USB data transfer
USB Host/Client for easy and sufficient data exchange between reader and reader/computer.

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AC800 Network Access Controller
Proximity Card & Pin Code Network Access Controller

Network Access Controller

AC800 Network Access Controller

Experience the simplicity for RFID technology in door access with SOMAX AC800 series Door Access Control system.

SOMAX AC800 series is pickproof as it has no keyholes, together with the built-in alarm system.

SOMAX AC800 series will automatically activate if door is forcefully entered or with illegal dismantle of the reader.

SOMAX AC800 series allows a maximum data storage up to 30,000 individuals; each individual's data were stored in the each card where access will not be acquired without presentation of the RF card.

SOMAX AC800 series is made user-friendly and reliable that offers the protection you required.
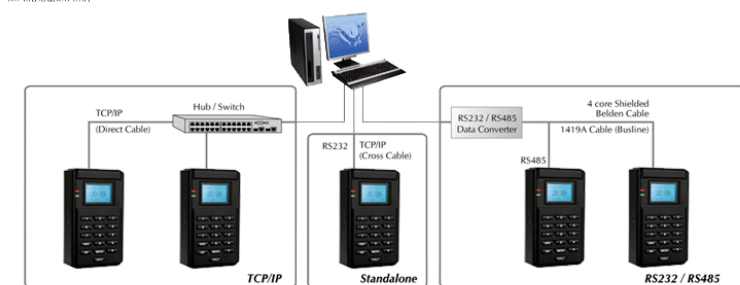
Specification

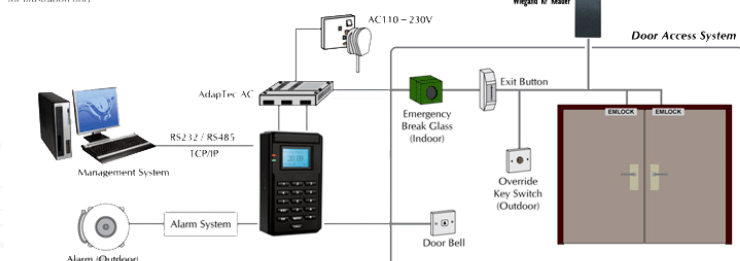|	
Card Holder	30000
Transactions	100000
RF Reader	125 KHz ID Card
Verification	30 ms
LCD	4 lines, 16 characters each line Graphic Display LCD
Oper. Temp	105 F (0-42 C)
Relay Output	12V DC, 3A
Port	RS 232/RS 485 – Ethernet 10/100 - USB
Alarm Control	NO & NC
Oper. Voltage	12V DC
Idle Current	60 mA
Oper. Current	450 mA

Key Features

RF Card
RFID Card system as an alternative verification method, proximity card and password identification methods are available in SOMAX AC800 series for user's comfort.

TCP/IP Method
SOMAX AC800 series installed with TCP/IP as a communicator between reader and computer that supports real-time data transfer for easy and efficient data management.

High performance CPU
32BIT Intel CPU for fast and sufficient process.

Linux O/S
Embedded with advanced Linux Operation System which can operate consecutively for 24 hours with reliable and stable performance.

Wiegand in & out
Wiegand in & out communication with any third party readers or door access controllers

High speed USB data transfer
USB Host/Client for easy and sufficient data exchange between reader and reader/computer.

System Communication
for illustration only
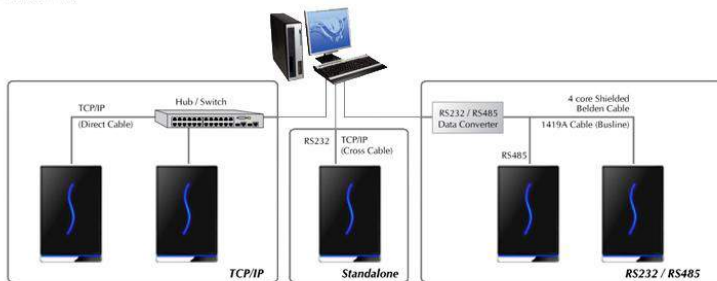
Installation Diagram
for illustration only

AC610 RF Reader

- ✓ Read range up to 10 cm
- ✓ Wiegand format 26 bits (RS232 ,RS485 format available)
- ✓ Fire Proof frame
- ✓ Wall mount
- ✓ PSK , ASK modulation
- ✓ 100% water proof
- ✓ Solid epoxy potted
- ✓ Reserve power polarity protection
- ✓ Reading time 30 ms
- ✓ External led control input
- ✓ Color dark pearl gray
- ✓ 2 color led (red and green), PIEZO buzzer
- ✓ External buzzer control input

eco RoHS compliant

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AC700 Web-based Access Controller
Proximity Card Web-based Access Controller

Web-based Access Controller

AC700 Web-based Access Controller

Experience the simplicity for RFID technology in door access with SOMAX AC700 series Door Access Control system.

SOMAX AC700 series is pickproof as it has no keyholes, together with the built-in alarm system.

SOMAX AC700 series will automatically activate if door is forcefully entered or with illegal dismantle of the reader.

SOMAX AC700 series allows a maximum data storage up to 30,000 individuals; each individual's data were stored in the each card where access will not be acquired without presentation of the RF card.

SOMAX AC700 series is made user-friendly and reliable that offers the protection you required.

Specification

Card Holder	30000
Transactions	100000
RF Reader	125 KHz ID Card
Verification	30 ms
LCD	NON
Oper. Temp	105 F (0-42 C)
Relay Output	12V DC, 3A
Port	RS 232/RS 485 – Ethernet 10/100 - USB
Alarm Control	NO & NC
Oper. Voltage	12V DC
Idle Current	60 mA
Oper. Current	450 mA

System Communication
for illustration only

Installation Diagram
for illustration only

Key Features

RF Card
RFID Card system as an alternative verification method, could be programmed by in or out function and it' slave reader too.

TCP/IP Method
SOMAX AC800 series installed with TCP/IP as a communicator between reader and computer that supports real-time data transfer for easy and efficient data management.

High performance CPU
32BIT Intel CPU for fast and sufficient process.

Linux O/S
Embedded with advanced Linux Operation System which can operate consecutively for 24 hours with reliable and stable performance.

Wiegand in & out
Wiegand in & out communication with any third party readers or door access controllers

High speed USB data transfer
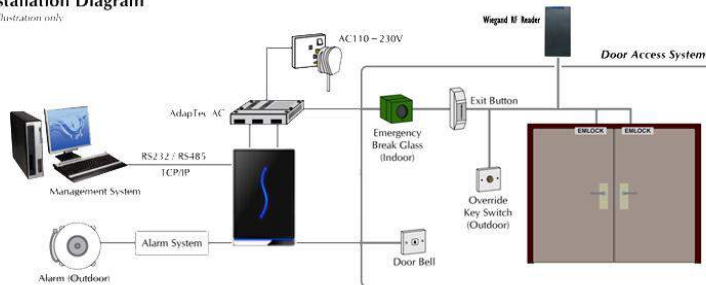USB Host/Client for easy and sufficient data exchange between reader and reader/computer.

AC610 RF Reader
- ✓ Read range up to 10 cm
- ✓ Wiegand format 26 bits (RS232 ,RS485 format available)
- ✓ Fire Proof frame
- ✓ Wall mount
- ✓ PSK , ASK modulation
- ✓ 100% water proof
- ✓ Solid epoxy potted
- ✓ Reserve power polarity protection
- ✓ Reading time 30 ms
- ✓ External led control input
- ✓ Color dark pearl gray
- ✓ 2 color led (red and green), PIEZO buzzer
- ✓ External buzzer control input

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F320C Network Time & Attendance
Fingerprint / Proximity Card Attendance Device

Fingerprint / Proximity Card

F320C Fingerprint / RF Card Time & Attendance

The SOMAX F320C Fingerprint Series Time & Attendance System not only simplifies your time clocking system but also providing you the most efficient way for human resources management as well as enhancing your employee's punctuality and productivity. SOMAX F320C series offers the most efficient and simplest way for all business sectors on time and attendance management.

Keying in of the employee identification number or time clocking card is no longer needed, just a touch of the registered fingerprint to verify a user to avoid any false check-in or enrollment occurrences. Apart from its functionality SOMAX F320C series also consider your needs on the outlook of the device; different color can be applied according to your own selection in order to meet the environment of your premises.

Anti-scratch Fingerprint Sensor

Specification

Templates	8000
Transactions	150000
Matching	1:N up to 8000 templates
Verification	$\leqslant$ 1 second
Ver. Type	FP, Card, Pin code (And/Or)
Identification	$\leqslant$ 2 seconds
FRR	$\leqslant$ 1%
FAR	$\leqslant$ 0.0001%
LCD	Color Graphic LCD Display
Oper. Temp	32-105 F (0-42 C)
Port	RS 232/RS 485 – Ethernet 10/100 - USB
Oper. Voltage	5V DC
Idle Current	60 mA
Oper. Current	450 mA
Length	7.3 inches / 185mm
Width	3.3 inches / 85mm
Depth	1.45 inches / 37mm

Key Features

Fingerprint
Enrolled fingerprints are stored in the system and through the fingerprint reader; user can be verified with the presence of their genuine fingerprint.

RF Card
RFID Card system as an alternative verification method, a combination of fingerprint, proximity card and password identification methods are available in SOMAX F320C series for user's comfort.

TCP/IP Method
SOMAX F320C series installed with TCP/IP as a communicator between reader and computer that supports real-time data transfer for easy and efficient data management.

Smart Recognition Algorithm
Manage one-to-one (1:1) and one-to-many (1:N) verifications of maximum 3,200 templates. SOMAX F320C series allows 360o rotation fingerprint placement with less than 2 seconds for identity authentication.

High performance CPU
32BIT Intel CPU for fast and sufficient process.

Linux O/S
Embedded with advanced Linux Operation System which can operate consecutively for 24 hours with reliable and stable performance.

Authentication
Multi-Verification methods of 15 different combinations with Fingerprint, Card with Password or ID with Password, or a combination of all to enhance security protection.

Voice
Geniality greeting voice system to instruct the user for device operation.
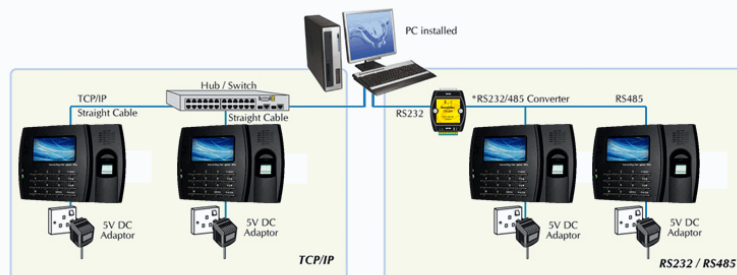
High speed USB data transfer
USB Host/Client for easy and sufficient data exchange between reader and reader/computer without complicated use of software and procedures.

▶ Layout Plan (Standalone)

▶ TCP / IP or RS485 Environment

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AC5000 Door Lock
Fingerprint / Proximity Door Lock

Fingerprint / Proximity Card

AC5000 Fingerprint / RF Card Door Lock

The fingerprint lock offers state-of-the-art single door management solution that provides you with unmatched options that comes with OLED, Standard USB interface. You can verify a person and open the door with fingerprint, password and ID/Mifare cards. The All-in-one fingerprint lock is very convenient to operate.

Enrollment and management of users are done on the OLED display. There are three user levels available to manage the system effectively - administrator, supervisor and user. An administrator or supervisor can do add, delete or change users very easily at the lock.

The USB Port for data transmission is the main feature of the lock which makes it easy to download user transactions from the lock – Professional and Intelligent.

Specification

Material	Zinc Alloy
Templates	500 fingerprint/Card , 100 password
Transactions	30,000
Matching	1:N up to 500 templates
Verification	$\leqslant$ 1 second
Ver. Type	FP, Password & Card
Identification	$\leqslant$ 2 seconds
FRR	$\leqslant$ 1%
FAR	$\leqslant$ 0.0001%
Front Panel Colors	Black/Red/Blue
Oper. Temp	0°C ~ 45°C
Humidity	20 %~ 80%
Power input	4 x 1.5V AA Battery
Backup Unlock Mechanism	Emergency battery & Mechanical key
Idle Current	60 mA
Oper. Current	450 mA
Length	315 mm
Width	78 mm
Height	38 mm

Key Features

MULTI-FACTOR IDENTIFICATION METHODS

Supports four identification mode which includes - fingerprint, password, RFID card and mechanical key or any combination.

RUGGED SENSOR TECHNOLOGY

Non-coating optical fingerprint sensor and cutting edge fingerprint matching technology.

VERSATILE APPLICATION AND RELIABLE MECHANISM

Strong stainless steel bar latch - suitable both for the main entrances as well as other doors. Keep visitor mode in Unlock-status if it is activated.

ROBUST MECHANICAL STRUCTURE

Pure stainless steel mechanical rotating structure with nanotechnology, which makes it last for many years under normal usage.

EASY INSTALLATION AND OPERATION

No wiring required – Standalone installation. Data transfer to and from PC can be done using USB flash disk. User registration and various settings can be done directly at the lock using OLED display.

EXTENDED BATTERY LIFETIME

Lock is powered by four standard alkaline 1.5 V batteries which can last up to 5,000 unlocking activities. The OLED display will show the status of the batteries power level.

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Wiegand & RS485 Readers

Outdoor Wiegand Proximity Card Readers, and Fingerprint Readers for Network Access Control Devices & for Access Control Panels

SM-AC610

Outdoor Wiegand Proximity Card Reader 10cm Reading Range

- ✓ Reading range up to 10 cm
- ✓ Wiegand format 26 bits
- ✓ Fire Proof frame
- ✓ Wall mount
- ✓ PSK , ASK modulation
- ✓ 100% water proof
- ✓ Reading time 30 ms
- ✓ External led control input

SM-AC625

Outdoor Wiegand Proximity Card Reader 10cm Reading Range

- ✓ Reading range up to 10 cm
- ✓ Wiegand format 26 bits
- ✓ Fire Proof frame
- ✓ Wall mount
- ✓ PSK , ASK modulation
- ✓ 100% water proof
- ✓ Reading time 30 ms
- ✓ External led control input

SM-AC635

Wiegand Pin Code/Proximity Card Reader 10cm Reading Range

- ✓ Reading range up to 10 cm
- ✓ Wiegand format 26 bits
- ✓ Proximity Card / Pin Code
- ✓ Wall mount
- ✓ PSK , ASK modulation
- ✓ 100% water proof
- ✓ Reading time 30 ms
- ✓ External led control input

SM-AC1640

Outdoor Wiegand Mid. Range Proximity Card Reader

- ✓ Power requirements: +12Volts linear regulated DC at 200mA typical, 300mA max.
- ✓ Interface: RS232/RS485/WIEGAND26
- ✓ Typical Maximum Read Range: Range 1000mm with ISO card
- ✓ Operating temperature: -10~+80
- ✓ Frequency: 125KHz typical
- ✓ Transponder: EM4100 Read Only
- ✓ Audio visual Indication: Buzzer output with external LED

SM-AC680

Fingerprint Access Control Reader

- ✓ CPU: 324MHz
- ✓ Sensor: SOMAX small-sized sensor
- ✓ Communication: RS485
- ✓ Standard function: ID Card Module
- ✓ Optional function: MF Card Module
- ✓ Voice Prompt: Buzzer
- ✓ Working Voltage: 12VDC
- ✓ Working Temperature: 0~45
- ✓ Dimension(W*H*D)mm: 50*102*37.3
- ✓ Protection Grade: IP65

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