



MorphoAccess™ 500 Series

Fingerprint identification for physical access control

- 1:1 authentication & 1:N identification up to 50,000 users
- Multi-factor authentication
- Plug & play solution for PACS
- Optional ISO 14443-A & B contactless reader (FIPS 201)
- Power Over Ethernet
- FBI PIV-IQS approved fingerprint sensor
- FIPS 201 approved template generator & matcher



Sagem Sécurité
SAFRAN Group



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Most physical access control systems in use today are based upon proximity cards or identification numbers. Unfortunately, this technology does not prevent individuals from using someone else's card or ID to enter a restricted area. Biometric technologies are extensively used to provide strong user authentication and avoid this type of security breach. Combined with contactless smart cards, biometric readers also allow multi-factor user authentication, thus reinforcing the system's overall level of security.



The MorphoAccess™ 500 series features a new range of indoor/outdoor biometric and contactless smart card terminals versatile enough to address a wide range of application from legacy or new access control systems to stand alone and governmental programs.

All the MA500 models operate in identification mode and offer a storage capacity of two biometric templates per person from 3,000 to 50,000 individuals broken down in 5 databases of 10,000 each.

The MA520 models also offer the possibility of reading contactless smart cards for 1:1 verification. The biometric data can either be stored on the card or on the terminal. In the latter case, the card is used to screen the database on the MA and retrieve the corresponding biometric templates. The device can also read ISO 14443-A & B cards (Contact us for more information).

The MA521 model integrates a specific optronic sensor, based on Sagem patented technology, for fake finger detection. This may be of great interest in highly secure environments or when the terminal is left unsupervised.



The whole MA 500 range offers standard interfaces to return the ID to the host system. The terminal can be used in either stand alone or networked mode. In stand alone mode, it activates its own internal relay. When networked, it can either operate in proxy or application mode. In proxy mode, the terminal is dependent on a host controller that sends commands according to the Morpho® Host System Interface protocol. In application mode, the terminal manages the operation workflow either for physical access control or time & attendance. In both modes the remote terminal management is possible through TCP/IP or USB. Terminal management includes, log retrieval, terminal configuration setup, firmware upgrade, biometric database operations, etc.

With the **MorphoAccess™ Easy Setup**, MorphoAccess™ terminals are easily configured.

Software

The MEMS application release 6.2 or higher (MorphoAccess™ Enrolment & Management System), is a complete solution for centralized management in legacy or stand alone systems. It supports the entire MA terminal range. We also offer integrators who develop their own system the Morpho Integrator's Kit (MIK).

MorphoAccess™ SDK

A Software Development Kit can be proposed to VARs who want to develop their own embedded application (Contact us for more information).

Technical specifications

- Integrated 500 dpi MorphoSmart™ sensor 23x23mm, **FBI PIV-IQS certified**
- Backlight LCD graphical display 128x64 pixels
- Backlight keypad with 12 Keys + 4 programmable function keys
- Buzzer and bi-color LEDs
- Communication port for IDs management: customizable Wiegand IN & OUT, RS .422, Data & Clock IN & OUT, Ethernet (10/100 Base T)
- WIFI (Check availability with SAGEM)
- Relay one change over contact
- Tamper & anti theft switches, secured screws
- Build-in SAM reader
- SSL (Contact SAGEM for more info)
- ISO14443-A and B contactless smart card readers (FIPS 201 certification pending)
- Operating temperature: -10° to +50°C
- Complies with EN60950, EN55022, FCC part 15 and EN55024, EN300330-1 and 2, CE, UL 60950 (certification pending).
- Supply Voltage: 9V, 16V (250mA typical @ 12V) or Power Over Ethernet (POE)
- Dimensions: 145mm x 160mm x 75mm
- RJ45 plugs (Ethernet) available from the I/O board and USB from mother board
- SDK for VARs

Performances:

- FIPS 201 approved biometric algorithms
- 1:1 verification time < 1sec
- Identification time (1,000 records) < 1s
- Adjustable FAR according to security requirements down to 10⁻⁸
- Manages up to 10,000 users in identification mode
- Max storage capacity = 50,000 users.

Mounting & Wiring

- Connection by internal termination with locking screws.

	MA 500	MA 520	MA 521
Contactless reader	No	MIFARE 1K & 4K	MIFARE 1K & 4K
Database size	3K or 50K	3K or 50K	3K or 50K
Fake Finger Detection	No	No	Yes
Multi-factor authentication	BIO, ID+BIO	card+BIO, Card+PIN, Card+BIO+PIN, card+BIOPIN+PIN	

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