MORPHOACCESS™ 100

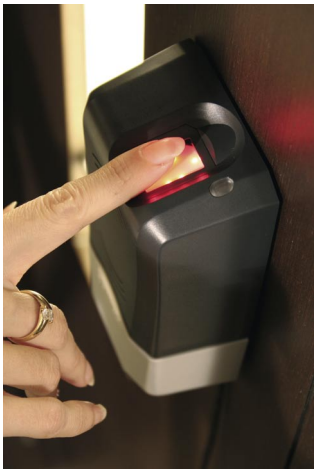
Fingerprint identification for physical access control

- *1:1 authentication & 1:N identification*
- *Multi-factor authentication*
- *Plug & play solution for existing system*
- *Optional ISO 14443 contactless card reader*
- *Stand-alone or networked operation*

Sagem Défense Sécurité
SAFRAN Group

MORPHOACCESS™ 100

Fingerprint identification for physical access control



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. To counter this, authorities now frequently check the card bearer's identity. They also rely on biometric technologies to provide strong user authentication and avoid this type of security breach. Combined with contactless smart cards, they also allow multi-factor user authentication, and as a result reinforce the system's overall level of security.

The MorphoAccess™ 100 series features a new range of indoor/outdoor biometric and contactless smart card terminals available at low cost. The MA100 is compact, easy to install and compatible with legacy or new access control systems.

The MA100 model operates exclusively in identification mode. It offers storage capacity of two biometric templates per person for up to 500 individuals. The database can either be downloaded via the network or via a USB interface.

The **MA110** and **MA120 models** can operate in either identification or authentication mode by reading contactless smart cards. The MA110 supports ***iClass*** 16 kbit contactless smart cards. The MA120 supports MIFARE 1K and 4K and DESFIRE contactless smart cards. The biometric data can be either stored on the card or on the terminal. In the latter case, the card ID is used to screen the database on the terminal and retrieve the corresponding biometric templates.

The whole MA 100 range offers standard interface, such as Wiegand, RS.485, Data & Clock or Ethernet, to return the ID to the host system. It is also possible to activate a relay when the terminal is used in stand-alone mode (i.e. to unlock a door).

The terminal can operate either in stand-alone or networked mode.

When the terminal is 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. This mode is very useful for developing specific applications. In application mode, the terminal manages workflow. In both modes remote terminal management is possible through TCP/IP. Terminal management includes initial configuration, firmware upgrade, log retrieval, biometric database operations, etc.

The MEMS (MorphoAccess™ Enrolment & Management System) application is used to register individuals and manage a group of terminals connected to a network (i.e. downloading databases and configuring a terminal remotely). This application allows the user to add a biometric function to an existing access control system without changing it. It can also be used independently of these systems so as to provide a simple access control system. MEMS supports the MA100 series, as well as the MA200 and MA300 series.

We also offer integrators who develop their own application the Morpho Integrator's Kit (MIK). The MIK offers a set of software components to easily integrate our terminals in a system.

Mounting & Wiring

A wall-mounted plate requires four screws. It is compatible with US (simple-gang) or EU electrical boxes. The terminal is wired via a hatch – protected by a secured screw – on the outside of the box to facilitate integration

Technical specifications

- Contains MorphoSmart™ CBM
- 500 dpi optical sensor, 14x20mm
- 1:1 verification time < 1sec
- Identification time (1000 templates) < 1.5secs
- Adjustable FAR according to security requirements
- Manages up to 500 users, two templates each in identification mode.
- Capable of simultaneous identification and verification
- Buzzer and multi-color LEDs
- Communication port for transmitting IDs: customizable Wiegand output, RS .485, Data & Clock, Ethernet (10/100 Base T)
- Relay one contact
- Tamper switch & secured screw
- Terminal management through TCP/IP or USB interface (on option); management includes terminal configuration, firmware upgrade, log retrieval, biometric database operations, etc
- MA110 supports HID ***i*Class** 16 kbit contactless smart cards
- MA 120 and MA120 D support ISO14443-A MIFARE and DESFIRE cards respectively.
- Operating temperature: -10° to +45°C
- IP53
- Complies with EN60068, EN55022 , FCC part 15 and EN55024, EN300330-1 and 2, CE, UL 950
- Supply Voltage: 9V, 16V (250mA @ 12V)
- Dimensions: 142mm x 84mm x 46mm
- Embedded software components: Morpho Imaging™ and MorphoSoft™Embedded

	MA 100	MA 110	MA 120	MA 120 D
Contactless reader	No	ISO 14443	ISO 14443	ISO 14443
Contactless card	-	***iClass*** 16K2 or 16K16	MIFARE 1K or 4K	DESFIRE cards
Operation	1:500 identification	1:1 & 1:500 identification	1:1 & 1:500 identification	1:1 identification

Sagem Défense Sécurité
SAFRAN Group

Phone: + 33 (0)1 58 11 73 42 - Fax: + 33 (0)1 58 12 43 43 - www.sagem-ds.com
Registred Office : Le Ponant de Paris - 27, rue Leblanc - F-75512 PARIS CEDEX 15 - FRANCE
Société anonyme au capital de 593.303.000 €
480 107 911 R.C.S. PARIS

Printed in France - Photos Sagem Défense Sécurité - DMC-D963/04/06