



## MorphoAccess® 500+ Series

**High-performance fingerprint  
identification terminal for  
physical access control and time  
& attendance**

- *Fast, accurate and reliable*
- *Multifactor authentication*
- *Up to 50,000 users in 1:N identification mode*
- *Easy integration into existing systems*
- *Power-Over-Ethernet (POE)*
- *Integrated MIFARE® and DESFire® contactless card reader/encoder (optional)*
- *Optional wireless LAN communication*



**Sagem Sécurité**  
SAFRAN Group



# MorphoAccess® 500+ Series

High-performance fingerprint identification terminal for physical access control and time & attendance

The MorphoAccess® 500+ Series (MA 500+) are versatile biometric terminals intended for access control and time & attendance. They use the Sagem Sécurité proprietary algorithms, which have acquired worldwide reputation for their accuracy and level of performance. Their rapidity and networking capabilities enable them to address all security applications, from one-door control to the protection of buildings, warehouses, vast infrastructures and government agencies. MA 500+ offers value-added retailers and access control manufacturers a reliable, powerful and scalable solution.

#### The know-how of the world N°1

- **Wide area, accurate fingerprint sensor**, for high definition fingerprint image acquisition
- The MA 500+ terminals offer the **highest level of security** on the market
- **Fast**: 0.7 sec in authentication mode and 0.9 sec in 1:1000 identification mode (including detection, coding and matching)
- **Accurate**: depending on the required level of security, the false acceptance rate or FAR can be configured down to 10<sup>-8</sup>

#### Powerful capabilities in a small package

- The **highest database capacity** on the market: up to 100.000 fingerprint templates with extended license
- **Multifactor authentication**: with MIFARE® and DESFire® contactless card reader, fingerprint and PIN code
- Operates in **standalone** or **networked** modes. For small populations, it is possible to capture fingerprints and encode badges on the terminal itself.
- Equipped with numerous interfaces for **easy integration into existing systems**
- **Trusted** and **versatile**
- **Option: false finger detection** with optronic sensor

#### Software

- **MorphoAccess® Enrolment & Management System (MEMS) Software**: complete application for centralized management (enrolment, terminals management, verification station)
- **Software Development Kit (SDK)**: can be proposed to VARs who want to develop and embed their own application in the MorphoAccess®.
- **Morpho Integrator's Kit (MIK)**: enables integrators to interface rapidly their own proprietary Windows® based applications to the MA 500+ Series.

#### Technical specifications

##### MorphoAccess® unit

- Integrated 500 dpi MorphoSmart™ optical sensor 23x23mm
- Backlit LCD graphical display 128x64 pixels
- Backlit keypad with 12 Keys
- + 4 programmable function keys
- Buzzer and bi-color LED
- Dual-core ARM 9 microprocessors with multi thread processing capability
- Dry contact relay

##### Interfaces

- USB port
- Communication port for identifier management: customizable Wiegand IN & OUT, RS.485, Clock & Data IN & OUT, Ethernet (10/100 Base T), Wi-Fi (optional)

##### Database

From 3.000 to 50.000 users, two fingerprint templates each, distributed in five databases of 10.000 users each (50K capacity with MA-Xtended license)

##### Security

- SSL on TCP/IP network
- Secure screws, antitheft and anti-tamper switches

##### Certifications

- FBI PIV-IQS\*
- Complies with CE, FCC and RoHS standards

**Operating conditions**: -10° to +50° C, 10% < RH < 80%

##### Voltage supply

9 V to 16 V (350 mA typical @ 12V) or Power Over Ethernet (POE)

##### Physical characteristics

- Dimensions: 155x155x74 mm
- Weight: 0.8kg

	MA 500+	MA 520+ D	MA 521+ D
<b>Function</b>	Identification	Identification & authentication	Identification, authentication & fake finger detection (option)
<b>Contactless reader</b>	-	MIFARE® 1K & 4K, DESFire® 2K, 4K, 8K	MIFARE® 1K & 4K, DESFire® 2K, 4K, 8K
<b>Database size</b>	3K or 50K with MA-Xtended license	3K or 50K with MA-Xtended license	3K or 50K with MA-Xtended license
<b>Multi-factor authentication</b>	BIO, PIN+BIO	BIO, Card, Card+BIO, PIN+BIO, Card+PIN, Card+PIN+BIO, Card+PIN+BIOPIN**	

\* PIV-IQS Personal Identify Verification - Image Quality Specifications  
 \*\* BIOPIN= alternate password solution instead of fingerprint

Sagem Sécurité may, at any time and without notice, make changes or improvements to the products and services offered and/or cease producing or commercializing them. The Sagem Sécurité logo and trademark are the property of SAFRAN Group.



Phone: + 33 (0)1 58 11 73 42 - Fax: + 33 (0)1 58 11 89 93 - www.sagem-securete.com - www.biometric-terminals.com  
 Registered Office: Le Ponant de Paris - 27, rue Leblanc - F-75512 PARIS CEDEX 15 - FRANCE  
 Société anonyme au capital de 159.876.075 €  
 440 305 282 RCS PARIS