

# MA SIGMA Series

Access control and time & attendance fingerprint stations

## Ultra-secure

Experts from Morpho and Bioscrypt joined forces to design the best of breed fingerprint identification terminal. Tailored for both access control and time & attendance applications, the MorphoAccess® SIGMA (MA SIGMA) Series implements 20 patents to master biometric identification and deliver a host of additional features, together with a refined and enjoyable user experience. Building upon the well-known Bioscrypt platform, the product range is further enhanced with additional anti-fraud and anti-buddy punching features. New generation Morpho algorithms (MINEX and FIPS 201 approved) ensure accuracy is maintained regardless of the number of users.



## Fresh, intuitive, flexible user interface

The MA SIGMA Series implements the design cues from today's most intuitive consumer electronics for fast user adoption. Housing a 5" WVGA color touchscreen, on-device administration is as easy as 1,2,3. The flexible user interface, complemented with the built-in videophone functionality, allows you to use your own content like corporate videos, audio messages, wallpapers etc. Furthermore, the touchscreen features 16 programmable function keys allowing access to time slots, holiday schedules and punch records (up to 1 million logs storage capacity).

## Multiple recognition factors

In addition to fingerprint, the MA SIGMA Series supports the most frequently used authentication methods in the field such as Prox®, iClass®, MIFARE®, MIFARE® Plus, DESFire®, NFC, PIN and BioPIN.

## Compatible with existing installations

The MA SIGMA Series can be used to upgrade an existing installation or to complement the installation with MorphoAccess® SIGMA devices using the M2A application or MIK SDK on a Morpho network or the SecureAdmin™ application or SecureSDK™ on a Bioscrypt network.

## Standard Features

- Time & attendance features
- Tablet-like user experience
- Videophone capabilities
- Anti-fraud: fake finger & face detection, duress finger
- Full set of contactless technologies including NFC
- IP 65 weather resistant design
- White/black lists
- 1:100k identification in less than 1 second (for frequent users)

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## Specifications

CPU	ARM® Cortex™-A9 core 1 GHz
Operating system	Linux operating system
Touchscreen	5" WVGA color touchscreen
Camera	VGA
Accessories	Speaker & microphone
	Audio & video player
Sensor certification	FBI PIV IQS certified optical fingerprint sensor
Contactless reader options	Prox®, iClass®, MIFARE®, MIFARE® Plus, DESFire®, NFC
Network / Communication	Ethernet, RS485, RS422, USB (host & slave)
	Optional Wi-Fi and 3G cellular communication
Internal storage capacity	512MB flash, 512MB RAM + µSD card slot
	3000 user records (2 fingers + 1 duress each), extendable up to 100000 with µSD card and licenses
	250,000 user IDs in white list
	1 million transaction logs (100000 w/o µSD card)
	1 million face picture logs (only w/ µSD card)
Inputs / Outputs	Wiegand in & out (customizable up to 512 bits), door relay, 3 GPI (including door monitoring), 3 GPO
Power supply	12V-24V DC
	Replaceable back-up battery
	Optional Power over Ethernet (PoE)
Tamper switches	Yes
Operating conditions	Temperature: -10°C to 55°C
	Humidity: 10% to 80% (non-condensing)
Design options	Indoor & Weather Resistant (IP 65 rated) version available
Dimensions	HxWxD = 153x151x58.5 mm
Weight	About 470 grams (depending on the variant)
Setup and maintenance	Flush mounted quick-tilt access
	Connectors are directly pluggable on rear side
	On-device or remote IP-based setup
	Secure USB port located on the side of the reader
EMC / Safety standards	CE, CB, FCC, UL294, RoHS, REACH and WEEE compliant

## Ordering Information

Part No.	Description
SMA-BIO-WR	SIGMA Series - Outdoor/WR/IP65, Multi-factor Bio/PIN (3k users incl.), 1M logs storage capacity, PoE incl.
SMA-PROX-WR	SIGMA Series - Outdoor/WR/IP65, Multi-factor Bio/Card/PIN/BioPIN (3k users incl.), HID Prox, 1M logs storage capacity, PoE incl.
SMA-MULTI-WR	SIGMA Series - Outdoor/WR/IP65, Multi-factor Bio/Card/PIN/BioPIN (3k users incl.), 1M logs storage capacity, PoE incl.
SMA-ICLASS-WR	SIGMA Series - Outdoor/WR/IP65, Multi-factor Bio/Card/PIN/BioPIN (3k users incl.), HID iClass, 1M logs storage capacity, PoE incl.
SMA-DB-10K	SIGMA Series - Database upgrade to 10,000 users, S/N or License ID of target terminal is required together w/ order for License generation
SMA-DB-50K	SIGMA Series - Database upgrade to 50,000 users, S/N or License ID of target terminal is required together w/ order for License generation
SMA-DB-100K	SIGMA Series - Database upgrade to 100,000 users, S/N or License ID of target terminal is required together w/ order for License generation