

# MorphoAccess® SIGMA Fingerprint Terminal



## Key Features

- Next generation Morpho algorithms (MINEX and FIPS 201 approved)
- FBI PIV IQS certified optical sensor
- Tablet-like user experience
- Anti-fraud: fake finger and face detection, duress finger
- Full set of contactless technologies including NFC(1)
- Network/Communication: Ethernet, RS-485, RS-422, USB (host and slave)
- Wi-Fi option
- IP65 rated design
- Fast 1:100 000 identification

## The Ultimate in Security

With exceptional experience and skill levels, experts from Morpho and Bioscrypt join forces to design the best-of-breed fingerprint identification terminal for the ultimate in security. Tailored for both access control and Time & Attendance applications, the MorphoAccess® SIGMA (MA SIGMA) Series implements no fewer than 20 patents to master biometric identification and delivers key security features together with a unique user experience.

## Ultra-Secure

The world's most accurate fingerprint technology is further enhanced with additional anti-fraud and anti-"buddy punching" features:

- Face detection and picture logging
- Fake finger detection
- Duress finger
- Banned/authorised user lists Intuitive, Flexible

## User Interface

Developed around the look and feel of today's most intuitive consumer electronics, the MA SIGMA Series is designed for fast user adoption:

- 5" WVGA colour touch-screen highlighting a sophisticated graphic user interface
- Seamless on-device administration
- Extensive customisation capabilities using your own content (corporate video, audio messages, wallpapers etc)

## Easy Set-up and Maintenance

Built for the real world and designed to save installation time and reduce maintenance costs.

- Flush mounted "quick-tilt" access
- No need for extra-cable wiring: connectors are directly pluggable on rear side
- On-device or remote IP-based set-up
- Secure USB port

## Compatible with Existing Installations

Upgrade or complement your installation with MorphoAccess® SIGMA devices using MorphoManager application on a Morpho network or SecureAdmin application on a Bioscrypt network.

## Integration with Access Control

Morpho provides an access control integration middleware called BioBridge. BioBridge is an enrollment and synchronisation middleware that overlays enrollment and demographic synchronisation between MorphoManager and CEM Systems' AC2000 access control systems. The following BioBridge compatible Morpho series readers are available from CEM Systems:

- SIGMA Series
- SIGMA Lite Series
- 3D Face Reader

## Specifications\*

General	
Models	Indoor and outdoor
CPU	ARM® Cortex™ - A9 core 1GHz
Operating System	Linux
Display	5" WVGA colour touchscreen, VGA camera
Audio	Yes, loudspeaker and microphone
Video	Yes, with audio
Sensor	FBI PIV IQS certified optical fingerprint sensor
Contactless Reader Options	Prox®, iCLASS®, MIFARE®/MIFARE® Plus/ DESFire®/NFC(1)
Network/Communication	Ethernet, RS-485, RS-422, USB (host and slave) Wi-Fi option 512MB Flash, 512MB RAM + 8GB µSD Card
Internal Storage Capacity	3000 user records (2 fingers + 1 duress each), extendable up to 100 000 with licenses 250,000 user IDs in authorised user list 1 million transaction logs 1 million face picture logs
Inputs/Outputs	Wiegand (customisable up to 512 bits), door relay, 3 GPI (including door monitoring), 3 GPO
Tamper Switch	Yes
Environmental	
Operational Temperature	-20°C to 60°C (-4°F to 140°F)
Humidity	10% to 80% (non condensing)

\*specification will vary depending on which model is selected. Contact CEM for details on current selected model.

Enclosure	
Dimensions (HxWxD)	153mm x 151mm x 58.5mm (6 x 5.9 x 2.3 inches)
Weight	470 grams (1.04lbs) (depends on variant)
Protection	IP65
Electrical	
Operating Voltage	12V-24V DC - Power over Ethernet (PoE), compatible with PoE+ switches
Operating Current	1 Amp @ 12V, PoE power 12.35W
Battery Backup	Yes
Regulatory	
Agency Certifications	CE, CB, FCC, UL294 (for indoor use only)
Compliance	RoHS, REACH, WEEE

(1) NFC: Near Field Communication. Support depends on the smartphone model used with the MA SIGMA\*

## Related Products



- AC2000
- AC2000 Lite
- AC2000 Airport

## About Johnson Controls

Johnson Controls is a global diversified technology and multi-industrial leader serving a wide range of customers in more than 150 countries. Our 120,000 employees create intelligent buildings, efficient energy solutions, integrated infrastructure and next generation transportation systems that work seamlessly together to deliver on the promise of smart cities and communities. Our commitment to sustainability dates back to our roots in 1885, with the invention of the first electric room thermostat.

For additional information, please visit [www.cemsys.com](http://www.cemsys.com) or follow CEM Systems on LinkedIn and Twitter.

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