Biode

FINGERPRINT IDENTIFICATION SOLUTIONS

MorphoAccess SIGMA

Leading access-control and time-and-attendance technology.

MorphoAccess® SIGMA
Series   BY IDEMIA

Access Control and Time & Attendance fingerprint station

Connected Objects

Compatible with Morpho and bioscrypt® existing installations

Morpho

STILL THE WORLD'S BEST IN BIOMETRICS... AND SO MUCH MORE!

WINNER
Best in Biometrics, Identification and Credentialing
SIA NEW PRODUCT SHOWCASE
ISC West 2014

- Time & Attendance features
- Full set of contactless technologies including NFC

- Tablet-like user experience
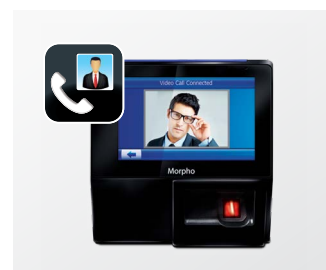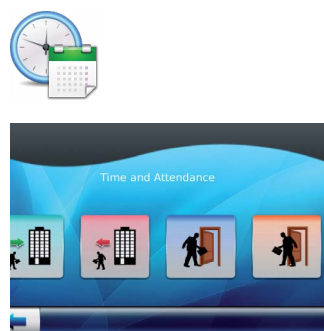- Anti-fraud: fake finger & face detection, duress finger

- Videophone function
- IP65 rated design

... and fast 1:100,000 identification!

⟨⟨|⟩⟩ IDEMIA

Awarded Best Biometric Product by the Security Industry Association, Morpho and Bioscrypt successfully 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 by IDEMIA implements no fewer than 20 patents to master biometric identification and deliver a host of additional features, together with a refined and enjoyable 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/authorized user lists

FRESH, INTUITIVE, FLEXIBLE USER INTERFACE

The MA SIGMA Series by IDEMIA implements the design cues from today's most intuitive consumer electronics, for fast user adoption:

- 5" WVGA color touchscreen highlighting a sophisticated Graphic User Interface
- Seamless on-device administration
- Extensive customization capabilities: use your own content! (corporate video, audio messages, wallpapers etc.)

TIME & ATTENDANCE READY

Increase your workforce management efficiency with:

- Touchscreen Time Clock, featuring 16 programmable function keys
- Access time slots and holidays scheduling
- Accurate punch records (up to 1 Million logs storage capacity)
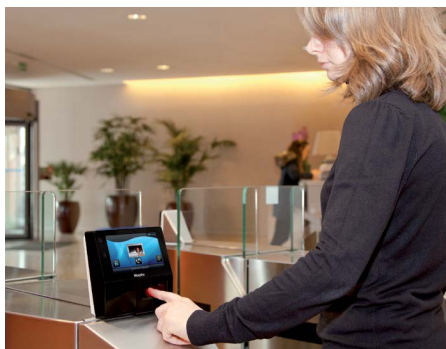- Real-time employee notifications
- Job Code management

VIDEOPHONE FUNCTION

- Built-in camera, speaker and microphone
- Standard IP-based video and audio interface
- Use cases:
- Call-in function: employees can quickly report a problem right from the Time Clock
- Surveillance: the terminal can be used by security staff to get pictures remotely from the security post

WORLD #1 FINGERPRINT TECHNOLOGY INSIDE

- Morpho fingerprint technology ranked #1 by NIST for accuracy
- Genuine 1:100K matching[1]: World first in the industry
- 1:100K identification in less than 1 second (for frequent users)
- Exclusive optimizations tailored for access control
- Accuracy maintained regardless of number of users
- FBI PIV IQS certified optical sensor

MULTIPLE RECOGNITION FACTORS

- NFC[2] technology support
- Full set of contactless smartcard options: Prox®, iClass®, MIFARE®, MIFARE® Plus, DESFire®
- PIN and BioPIN[3] codes

EASY SET-UP AND MAINTENANCE

Built for the real World and designed to save time at installation 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 located on the side of the product

COMPATIBLE WITH EXISTING INSTALLATIONS

Upgrade or complement your installation with MorphoAccess® SIGMA devices by IDEMIA using:

- MorphoManager by IDEMIA or MIK SDK on a Morpho network
- SecureAdmin application or SecureSDK on a Bioscrypt network

[1] Search carried out against single 100K user database
[2] NFC: Near Field Communication. Support depends on the smartphone model used with the MA SIGMA
[3] BioPIN: alternate password solution instead of fingerprints
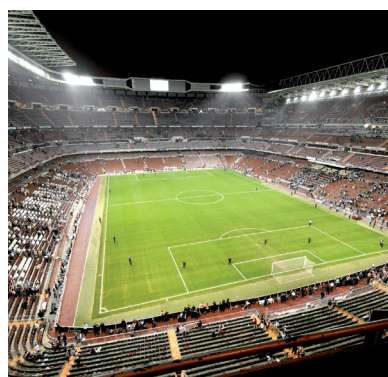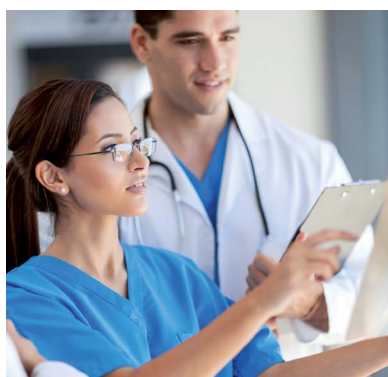
Technical specifications

- **CPU:** ARM® Cortex™-A9 core 1GHz

- **Linux Operating System**

- **5" WVGA color Touchscreen, VGA Camera**

- **Loudspeaker & Microphone**

- **Audio & Video player**

- **FBI PIV IQS certified optical fingerprint sensor**

- **Contactless reader options:** Prox®, iClass®, MIFARE®/MIFARE® Plus/ DESFire®/NFC[(1)]

- **Network/Communication:** Ethernet, RS485, RS422, USB Wi-Fi and 3G options

- **Internal storage capacity:** 512MB Flash, 512MB RAM + 8GB microSD Card
  - 5000 user records (2 fingers + 1 duress each), extendable up to 100,000 with licenses
  - 250,000 IDs in authorized user list
  - 1 Million transaction logs
  - 10,000 face picture logs

- **Inputs/outputs:** Wiegand In & Out (customizable up to 512 bits), OSDP, Door Relay, 3 GPI (including Door monitoring), 3 GPO

- **Power supply:** 12V-24V DC Power over Ethernet (PoE), compatible with PoE+ switches

- **Tamper switches**

- **Operating conditions:**
  - Temperature: -20°C to 60°C (-4°F to 140°F)
  - Humidity: 10% to 80% (non condensing)

- **Ingress Protection:** IP65

- **Compact with slim profile:** HxWxD = 153x151x58,5 mm (6x5,9x2,3 inches)

- **Ultra-light:** about 470 grams (depends on variant)

- **EMC/Safety standards:**
  - CE, CB, FCC, BIS
  - UL294 (for indoor use only)

- **RoHS, REACh and WEEE compliant**

THE SIGMA FAMILY

IDEMIA

Join us on

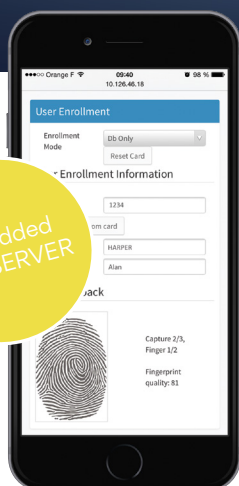www.idemia.com

MorphoAccess® SIGMA
Lite Series BY IDEMIA

Slim and powerful fingerprint access terminals

Connected Objects

Compatible with Morpho and bioscrypt® existing installations

Embedded WEB SERVER

Morpho

Monday 11:30:41

World's #1 fingerprint technology inside
1:10,000 user identification in 1 second

High capacity
30,000 templates, 250,000 IDs in authorized user list, 1 Million logs

Flexibility
Prox®, iClass® or MIFARE®/DESFire®/ NFC contactless card reader as an option

Anti-fraud features
Fake finger detection, duress finger, timed anti-pass back

Tough design
IP65 rated and vandal resistant (IK08)

⟨⟨|⟩⟩ IDEMIA

The SIGMA family welcomes new members!

Engineered with the same attention to detail and performance as their predecessor, the MorphoAccess® SIGMA Lite terminals by IDEMIA are specifically designed to equip narrow mounting surfaces, such as glass/aluminum door mullions, turnstiles, or server rack doors.

With two designs and multiple card reader options, there are a variety of models to address the widest range of deployment scenarios, both indoors and outdoors.

MA SIGMA Lite

With blue/green/red LED indicator and buzzer

60 mm

Morpho

World's #1 fingerprint technology inside

- Morpho fingerprint technology ranked #1 by NIST for accuracy
- Up to 10,000 users (30,000 templates) in 1:N identification mode
- 1:10,000 user matching in 1 second
- Accuracy maintained regardless of number of users in database
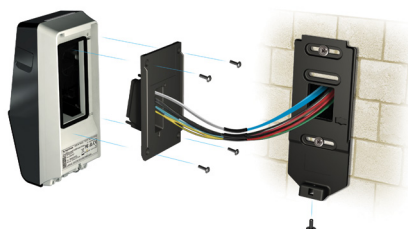- FBI PIV IQS certified optical sensor

Adjustable attachment to axis or to either side of axis

Full set of card reader options

- Prox®
- iClass®
- MIFARE®/MIFARE® Plus/DESFire®/NFC[1]

Built for the real World

TOUGH DESIGN[2]

IP 65

IK 08

EASY INSTALLATION AND MAINTENANCE

COMPATIBLE WITH EXISTING INSTALLATIONS

Morpho
and
b i o s c r y p t®

- Using MorphoManager by IDEMIA or MIK SDK on a Morpho network
- Using SecureAdmin application or SecureSDK on a Bioscrypt network

[1] NFC support depends on the smartphone model used with the MA SIGMA Lite/Lite+ device
[2] IK08 rating is not available for MA SIGMA Lite+ design

148 mm (5.83")

(2.36")

MA SIGMA Lite+

With 2.8" QVGA color
touchscreen and buzzer

```
    S
    T
    R
  S O
  O N  S   S
S I G M A  = THE RIGHT COMBINATION
L M   A  F
E     R  E
E     T
K
```

Monday   11:30:41

Morpho

Enhanced interactivity
on MA SIGMA Lite+ touchscreen

• Time & Attendance In & Out function keys
• User ID, PIN and BioPIN[3] management
• Intuitive icons and live messages

Anti-fraud features

• Fake finger detection
• Duress finger
• Timed anti-pass back function[4]
• Banned/authorized user lists

Embedded web server

Enables on-device
enrollment, terminal
configuration and
transaction log retrieval

Use with any device
(PC, laptop, tablet,
smartphone)

Use with any OS
(Apple iOS, Android,
Windows)

Use with any web browser
(Google Chrome,
Mozilla Firefox, Safari,
Internet Explorer)

[3] Alternate password solution instead of fingerprints
[4] Prevents repeated authorizations by the same user, within a configurable time period

Technical specifications

- **CPU:** ARM® Cortex™-A9 core 1GHz

- **Linux Operating System**

- **FBI PIV IQS certified optical fingerprint sensor**

- **Contactless reader options:** Prox®, iClass®, MIFARE®/MIFARE® Plus/DESFire®/NFC[1]

- **Network/Communication:**
  - Ethernet, RS485, USB
  - Wi-Fi option

- **Power supply:**
  - 12V-24V DC
  - Power over Ethernet (PoE), compatible with PoE+ switches

- **Internal storage capacity:** 512MB Flash, 512MB RAM
  - 500 user records, extendable to 3,000 or 10,000 with license (*3 templates each, including 1 duress)
  - 250,000 IDs in authorized user list
  - 1 Million transaction logs

- **Inputs/outputs:** Wiegand In & Out (customizable up to 512 bits), OSDP, Door Relay, 2 General Purpose Inputs (including Door monitoring), 2 General Purpose Outputs

- **Tamper switches**

- **Operating conditions:**
  - Temperature: -20°C to 55°C (-4°F to 131°F)
  - Humidity: 10% to 80% (non condensing)

- **Ingress protection:** IP65

- **Mechanical impact protection:** IK08[2]

- **HxWxD =** 156*68*62 mm (6.14*2.68*2.44 inches)

- **Weight:** 280 grams

- **EMC/Safety standards:**
  - CE, CB, FCC, BIS
  - UL294 (for indoor use only)

- **RoHS, REACh and WEEE compliant**

THE SIGMA FAMILY

[1] NFC support depends on the smartphone model used with the MA SIGMA Lite/Lite+ device
[2] IK08 rating is not available for MA SIGMA Lite+ design

〈〈〉〉 IDEMIA

Join us on

www.idemia.com

MorphoAccess® SIGMA
Extreme Series BY IDEMIA

Access & Time fingerprint terminal for harsh operating conditions

Connected Objects

Compatible with Morpho and bioscript® existing installations

- Withstands strong impacts and resists to vandalism (IK09 rated)

- Impermeable to dust and water (IP65 sealed enclosure)

- 300,000 templates, 250,000 IDs in authorized user list, 1 Million logs

- Fake finger and face detection, duress finger, timed anti-pass back

- Time & Attendance and videophone functions

- Embedded web server

- Prox®, iClass® or MIFARE®/DESFire®/ NFC contactless card reader as an option

⟨⟨|⟩⟩ IDEMIA

Robust in all aspects

IK09

The MA SIGMA Extreme, **including its large capacitive touchscreen,** is resistant to vandalism and can withstand the impact of a 500g (1 lb.) steel ball dropped from a height of 2 meters (6.5 ft.).

IP65

The product enclosure, **front and rear,** is sealed and impermeable to dust and water.

TOUGH HOUSING
- Polycarbonate (PC) strong plastics
- Minimum thickness of 3.5 mm (0.14 in.)
- Resistant to UV and weathering (UL 746C f1 rated)
- Dirt-repellent grained texture

TEMPERED GLASS
- 3.8 mm (0.15 in.) thick

ENHANCED MAN MACHINE INTERFACE
- Very bright capacitive touchscreen, equipped with an ambient light sensor that automatically adjusts the display illumination
- Powerful loudspeaker suited to noisy environments

FIELD-PROVEN SENSOR
- Largest single fingerprint optical sensor on the market (23x23 mm)
- FBI PIV IQS certified
- Widely deployed in harsh environments (mines, seaports, etc.)

METICULOUS SEALING
- Screwed, sealed back panel protects electronics
- Fixed cable glands protect wiring

STURDY WALL MOUNTING
- Thick wall plate (3.5 to 11.4 mm / 0.14 to 0.45 in.), fixed with 6 peripheral screws (recommended, also compatible with standard electrical boxes)
- Ingenious, symmetrical lift-and-rotate opening mechanism enables easy in place maintenance
- 4 lateral hanging pins + 2 bottom fastening screws
- Withstands a load > 50 kg (110 lb.) vertically and horizontally

For demanding environments

MANUFACTURING SITES   MINES   OIL & GAS   POWER PLANTS   CONSTRUCTION SITES

RAILROAD INDUSTRY   AIRPORTS   SEAPORTS   SPORT ARENAS   CAMPUSES

THE SIGMA FAMILY

Rugged and powerful, the MorphoAccess® SIGMA Extreme by IDEMIA is a remarkable addition to the SIGMA Family of fingerprint readers.

Based on the same platform as other SIGMA devices, the outdoor MA SIGMA Extreme is specifically designed to operate in difficult environments (dust, salt mist, tough manual workplaces, etc.) and in harsh weather conditions.

With the entire SIGMA Family, integrators have a complete range of biometric terminals at their disposal, compatible with each other, to secure any kind of use case scenario – whether indoors or outdoors – with the World's most accurate fingerprint technology.

Key features

World #1 fingerprint technology

- Morpho fingerprint technology ranked #1 by NIST for accuracy
- Extendable identification capacity: 1:5K (default), 1:10K, 1:50K or 1:100K users, with genuine matching[1]
- 1:100K identification in less than 1 second (for frequent users)
- Accuracy maintained regardless of number of users

Anti-fraud features

- Patented, BSI[2] certified electro-optical Fake Finger Detection technology (option)
- Face detection and picture logging
- Duress finger option
- Timed anti-pass back function[3]
- Banned/authorized user lists
- Tamper switches

Time & attendance functions

- Touchscreen Time Clock, featuring 16 programmable function keys
- Access time slots and holidays scheduling
- Accurate clock in/out records (up to 1 Million logs storage capacity)
- Real-time employee notifications
- Job Code management

Videophone

- Built-in camera, speaker and microphone
- Standard IP-based audio/video interface
- Use cases:
- Call-in function: e.g. employees can quickly report a problem right from the Time Clock
- Surveillance: the terminal can be used by security staff to get pictures remotely from the security post

Embedded web server

After connection (via Ethernet or optional Wi-Fi) to a laptop, tablet or smartphone, it enables administrator to:
- Trigger on-device enrollment (enrollment on product touchscreen is also available)
- Configure product (full settings)
- Get transaction logs

Flexible architecture

- Prox®, iClass® or MIFARE®/DESFire®/NFC[4] contactless card reader as an option
- Various software integration options:
- ILV or Thrift commands at low protocol level
- Morpho Integrator's Kit (MIK) by IDEMIA or SecureSDK at SDK component level
- MorphoManager by IDEMIA or SecureAdmin at application level

[1] Search carried out against a single database
[2] Bundesamt für Sicherheit in der Informationstechnik (German Federal Agency for the Security of Information Technologies)
[3] Prevents repeated authorizations by the same user, within a configurable time period
[4] NFC support depends on the model/settings of the smartphone used with the MA SIGMA Extreme device

Technical specifications

- **CPU:** ARM® Cortex™-A9 core 1GHz
- **5" WVGA color capacitive touchscreen with ambient light sensor**
- **Front camera for face picture capture and videophone**
- **Loudspeaker & microphone**
- **Audio & video player**
- **FBI PIV IQS certified optical fingerprint sensor**
- **Contactless reader options:**
  - Prox®
  - iClass®
  - MIFARE®/MIFARE® Plus/DESFire®/NFC[1]

- **Internal storage capacity:** 512MB Flash, 1GB RAM + 8GB microSD Card
  - 5000 user records (2 fingers + 1 duress each), extendable up to 100,000 with licenses
  - 250,000 IDs in authorized user list
  - 1 Million transaction logs
  - 10,000 face picture logs
- **Network/Communication:**
  - Ethernet, RS485, RS422, USB
  - Wi-Fi option
- **Inputs/outputs:**
  Wiegand In & Out (customizable up to 512 bits), OSDP, Door Relay, 3 GPI (including Door monitoring), 3 GPO

- **Power supply:**
  12 to 24 V DC (1A min @12V)
  Power over Ethernet (PoE) – Compatible with PoE+ switches
- **Tamper switches**
- **Operating conditions:**
  - Temperature: -20°C to 60°C (-4°F to 140°F)
  - Humidity: 10% to 95% (non condensing)
- **Ingress protection:** IP65
- **Mechanical impact protection:** IK09
- **HxWxD** = 301*142*97 mm (11.85*5.59*3.82 in.)
- **Weight:** ~1.6kg (~3.5 lb.)
- **EMC/Safety standards:** CE, CB, FCC
- **RoHS, REACh and WEEE compliant**

[1] NFC support depends on the model/settings of the smartphone used with the MA SIGMA Extreme device