**MorphoWave™ Compact**

Contactless access everywhere

MorphoWave™ Compact is a unique solution for frictionless fingerprint access control. This masterpiece of engineering delivers the award-winning, field-proven performance of MorphoWave™ contactless 3D fingerprint scanning technology in a stylish and compact casing, suitable for any location.

**Benefits**

**Convenience & security**

Users are positively identified with a simple, hygienic contactless wave of the hand. The patented touchless sensor performs a 3D scan and verification of 4 fingers in less than 1 second up to 100,000 users, ensuring the most accurate and reliable fingerprint matching, for maximum security.

**High throughput**

The speed of the touchless scan and verification, allowed by the use of advanced algorithms leveraging AI, enables users to remain in motion while being identified. The unrivaled throughput (up to 50 people per minutes) provides more user convenience and increased productivity, as employees will not have to spend time queuing for access or time/attendance.

**Versatile, easy deployment**

IP65 rated and PoE+ powered, this compact reader ensures that MorphoWave™ technology can be deployed at every location, indoor or outdoor, on a turnstile, a door or a speedgate.

MorphoWave™ Compact is already integrated with more than 25 of the industry’s leading access control systems and speedgates/turnstiles vendors.

**Multifactor authentication**

In addition to biometrics, MorphoWave™ Compact embedded card reader natively supports Prox, iClass, MIFARE, DESFire and PIN codes.

It is also capable of scanning printed QR codes* for visitor management.

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**Why IDEMIA?**

With more than 40 years of experience in biometrics and over 4 billion fingerprints managed worldwide, IDEMIA gets top-tier performance in independent tests worldwide (such as NIST¹ evaluations) and is thus the undisputed leader in biometric technologies. Our algorithms and sensor technologies, combined with our end-product design and manufacturing expertise, make us the partner of choice for the most prestigious organizations.

IDEMIA’s solutions, encompassing contact and contactless fingerprint, hybrid vein/print and facial recognition readers, have been deployed in more industries and tougher environments than any other vendors’ solutions.

¹ National Institute of Standards and Technology
Field-proven touchless fingerprint technology... and still unique

- Captures and matches 4 fingers in less than 1 second
- Either left or right hand, in any direction
- Copes with wet, dry, damaged fingers
- Robust to external light and dust
- Touchless: no latent prints left on scanner
- Easy gesture: immediate user adoption

The award-winning MorphoWave™ technology has become the benchmark in frictionless access, securing high traffic access points in the world’s largest financial institutions, critical infrastructure facilities, universities and healthcare organizations.

Accessories

**TOWER**
Stylish pedestal for easy installation. Available in black or brushed steel finish

**VISOR**
For outdoor installations where the device and its sensor are exposed to heavy rains or dazzling sunlight

Key product features

**Anti-fraud features**
- Fake finger detection
- Timed anti-pass back function\(^1\)
- Banned/authorized user lists
- Tamper switches

**Flexible architecture**
- 1:N identification or multifactor authentication cards + PIN code
- Software integration options:
  - Thrift commands (low protocol level)
  - MACI component (SDK level)
  - MorphoManager (application level)

**Time & attendance functions**
- Touchscreen time clock
- Timed anti-pass back function\(^1\)
- Banned/authorized user lists
- Real-time employee notifications
- Job code management

**For real world deployments**
- IP65 rated design\(^2\)
- Multiple interfaces including TCP/IP
- Power over Ethernet (PoE+)
- Wi-Fi and 4G options
- Ingenious, symmetrical opening mechanism enables easy wall-mounting and in-place maintenance

Multiple use cases enabled with the device

- Doors
- Gates
- Parking
- Canteen

Technical specifications

- **CPU:** Nvidia ARM Cortex-A15 Quad-Core 2.1GHz
- **4.3” WVGA color capacitive touchscreen**
- **Loudspeaker & microphone**
- **Audio & video function**
- **Touchless fingerprint sensor**
- **Hand presence detection**
- **QR code scanning capability\(^3\)**
- **Contactless reader options:**
  - Prox, iClass, MIFARE/DESFire, SEOS, Mobile Acess
- **Tamper switches**
- **Internal storage capacity:**
  - 16GB Flash, 2GB RAM
  - 20,000 user records (24 fingers each) for
    - 1:N identification, extendable to 40,000 or
    - 100,000 with licenses
  - 250,000 IDs in authorized user list
  - 1 million transaction logs
- **Network/Communication:**
  - Ethernet, RS485, RS422, USB\(^4\)
  - Wi-Fi and 4G options
- **Inputs/outputs:**
  - Wiegand In & Out (customizable up to 512 bits), OSDP, Door Relay, 3 CPI (including
    - Door monitoring), 3 GPO
- **Power supply:**
  - 12 to 24 V DC (2.5A min @12V)
  - Power over Ethernet with PoE+
  - Power over Ethernet with PoE+ switches
- **Operating conditions:**
  - Temperature: -10°C to 55°C (14°F to 131°F)
  - Humidity: 10% to 80% (non condensing)
- **Ingress protection:** IP65\(^2\)
- **HxWxD:**
  - 250*152*216 mm     (9.9*6*8.5 in.)
- **Weight:**
  - 2.2 kg (4.85 lb.)
- **EMC/Safety standards:**
  - CE, CB, FCC
- **RoHS, REACh and WEEE compliant**

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\(^1\) Prevents repeated authorizations by the same user, within a configurable time period
\(^2\) Recommendation for outdoor installation: avoid direct exposure of sensor to rain and sunlight (e.g., place under a canopy)
\(^3\) Printed QR codes only: specifications available on demand
\(^4\) Micro-USB port for terminal configuration or dongle (Wi-Fi or 4G) connection