

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/turnstile 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.

* QR on smartphone screen in a later release

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 function¹
- › 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
- › Access time slots, holiday scheduling
- › Real-time employee notifications
- › Job code management



For real world deployments

- › IP65 rated design²
- › 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**
Intercom function
- › **Audio & video player**
- › **Touchless fingerprint sensor**
Hand presence detection
QR code scanning capability⁽³⁾
- › **Contactless reader options:**
Prox, iClass, MIFARE/DESFire
- › **Tamper switches**
- › **Internal storage capacity:**
16GB Flash, 2GB RAM
 - 20,000 user records (2*4 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 GPI (including Door monitoring), 3 GPO
- › **Power supply:**
12 to 24 V DC (2.5A min @12V)
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**

⁽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