

MorphoWave™ Compact Frictionless Biometric Access Control Reader



Features That Make a Difference:

- Scans users at regular or fast walking speed – no need to pause or stop
- Capable of throughput above 45 people per minute
- Up to 40K onboard user capacity (320K templates); 20K users off-the-shelf
- Support for 1:N (biometric only) or 1:1 matching using biometric, card and/or PIN
- Dual-channel optical system to capture the largest biometric area in 3D
- Immune to finger pressure variations
- Easily copes with dry and wet fingers
- No ghost images (latent prints) left on scanner
- Mitigates hygiene and cultural concerns
- Robust against external light and dust
- Consistent NIST #1 algorithm rankings
- Winner of SIA Best New Product Award in 2018 (User Authentication and Credentialing)

MorphoWave™ Compact

MorphoWave™ is the latest addition to IDEMIA's range of readers for frictionless biometric access control. The unique engineering delivers the award-winning, field-proven performance of MorphoWave contactless 3D fingerprint technology in a stylish and compact wall-mounted device, suitable for any location.

The Ultimate in Efficiency

As enterprises continue to move towards efficiency, frictionless access to controlled areas is paramount. Users need to be able to gain access naturally, without having to break gait. MorphoWave is the world's first biometric access solution capturing and matching four fingerprints with a single hand movement. It implements a patented, truly contactless technology that not only acquires extremely accurate fingerprint data, but also overcomes the challenges wet/dry fingers and latent prints pose to conventional scanning systems.

Patented Touchless Sensor

The dynamic, patented touchless sensor in MorphoWave Compact allows users to remain in motion while being identified and authenticated at a control point, making it ideal for securing high traffic areas. The reader's design mitigates hygiene concerns and the potential issue of ghost images (latent prints) left behind on the scanner.

Convenience & Security

Users are positively identified with a simple wave of the hand. The patented, touchless sensor technology scans four fingers in 3D, ensuring the most accurate and reliable fingerprint matching for maximum security.

Versatile, Easy Deployment

IP65 rated and PoE+ powered, the compact, wall-mount reader ensures that MorphoWave technology can be deployed at every location. MorphoWave Compact is integrated with C•CURE 9000 via the Morpho BioBridge system and offers the embedded enrollment button functionality.

Multifactor Authentication

MorphoWave Compact natively supports Prox, iCLASS, and MIFARE/DESFire cards, and PIN code, in addition to biometrics. The reader is also capable of scanning QR codes for visitor management.

Works seamlessly with MorphoWave™ Tower

MorphoWave Compact represents an 86% reduction in size and 93% reduction in weight compared with MorphoWave Tower, making it usable at every door and not only in high traffic lobbies. The two products complement each other and work seamlessly together to secure any capacity or throughput requirements.

The most proven touchless fingerprint technology in a compact, full-featured access control terminal

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 institutions.

Anti-Fraud Features

- Fake finger detection
- Timed anti-pass back function¹
- Banned/authorized user lists
- Tamper switches

Time & Attendance Functions

- Touchscreen time clock, featuring 16 programmable function keys
- Access time slots and holiday scheduling
- Real-time employee notifications
- Job code management

Specifications

General

Models	IP65
CPU	Nvidia ARM Cortex-A15 QuadCore 2.1GHz
Operating System	Linux
Display	4.3" WVGA color capacitive touchscreen
Audio	Yes, loudspeaker and microphone
Video	Yes, audio and video player
Sensor	FBI PIV IQS certified optical touchless 3D fingerprint sensor, hand presense detection, QR code scanning capability (visitor management)
Card Options	2 product variants available MDPI = Prox, iCLASS, MIFARE/DESFire cards supported
Network/Communication	Ethernet, RS485, RS422, USB (Wi-Fi optional)
Storage Capacity	16GB Flash; 2GB RAM, 20,000 user records (2/4 fingers each) for 1:N identification - extendable to 40,000 with licenses ³ , 250,000 IDs in authorized user list, 1 million transaction logs
Inputs/Outputs	Wiegand In/Out (customizable up to 512 bits), Door Relay, 3 GPI (including door monitoring), 3 GPO tamper switches

Flexible Architecture

- 1:N identification or multi-factor authentication with Prox, iCLASS, and MIFARE/DESFire cards, and PIN code
- Software integration options:
 - Thrift commands (low protocol level)
 - MACI component (SDK level)
 - MorphoManager (application level)

For real world deployments

- IP65 rated design²
- Multiple interfaces including TCP/IP
- Power over Ethernet (PoE+)
- Wi-Fi and 4G options
- Smart and convenient, symmetrical opening mechanism enables easy wall-mounting and in-place maintenance

Enclosure

Dimensions (HxWxD)	250 x 152 x 216 mm (9.9 x 6 x 8.5 in)
Weight	2.2 kg (4.85 lb)

Electrical

Power Supply	12 to 24 V DC (2.5A min @12V), PoE with PoE+ switches
--------------	---

Environmental

Operating Conditions	-10°C to 55°C (14°F to 131°F) Humidity: 10% to 80% (non condensing) Ingress protection: IP65 ²
----------------------	---

Regulatory

Agency Certifications	CE, CB, FCC
Compliance	RoHS, REACH, WEEE

(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 (e.g. place under a canopy)
(3) Contact your local representative in case of higher user database size requirements

Related Products



C•CURE 9000 iSTAR Ultra iSTAR Ultra SE

Approvals

