MorphoWave™ SP
Contactless fingerprint terminal with a simplified profile
**Why IDEMIA?**

With more than 40 years of experience in biometrics and over 4 billion fingerprints managed worldwide, IDEMIA achieves top-tier performance in independent tests (such as NIST evaluations).

Our algorithms, sensor technologies and manufacturing expertise make us the partner of choice for many biometric deployments around the world.

We provide biometric products and solutions to governments, law institutions and public services where identity, authentication and security are a priority.

**Key benefits**

- Touchless fingerprint scanning
- Simplified user interface with multi-color LED indicators
- Accurate & fast
- Hygienic
- Up to 10K user records in 1:n

IDEMIA continuously invests in MorphoWave™ technology since 2016, improving ergonomics, speed, and accuracy to leverage the latest advancements with the use of Artificial Intelligence.
**Key features**

**Field proven contactless technology**
Users are identified with a simple, hygienic contactless wave of the hand

- Either left or right hand, in any direction
- Copes with wet, dry, or damaged fingers

**Simplified design for a user-friendly experience**

- Bright color & stylish pattern on both sides
- LED Indicators give information on device status

**Accuracy and performance**
4 fingerprints

- Scan and verification of 4 fingers in less than 1 second of up to 10,000 users

**IDEMIA best algorithms performance**

2019 Accuracy and Interoperability Test
Key features

Multi-factor authentication capability with built-in RFID & BLE readers
Reads all kinds of contactless card technologies as well as mobile credentials

- Mifare, Desfire, HID Prox, iClass, SEOS
- Biometric data can be stored in the card
- HID Mobile Access via BLE or NFC*
- QR code scanning for visitors**

* NFC: on Android only
** QR code printed on paper only
Key features

**Plug & play with most industry players for easier and faster deployments**

Already supported by most PACS platforms, communication with door controller by OSDP secure mode and integrated by leading gate vendors.

**Quick and easy installation & maintenance to save on deployment costs**

- Thick wall plate to fix the product
- Simpler cabling & plugging

**Multiple use cases and installation configurations**

Walls, turnstiles, gates, pedestals.
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 harsh sunlight.
Support & Services

An optimized offering

Benefit from IDEMIA's world leading expertise to leverage knowledge and mastery of biometric solutions.

Have the assurance that product configuration is constantly optimized for accuracy, security, and privacy.

Receive a high level of reactivity and support from our Customer Care Center.

Have visibility and guidance to anticipate the future.
Specifications

Technical specifications

- **CPU**: NXP AMR Cortex A53 Quad core, 1.8 GHz
- **LED colors**
- **Touchless fingerprint sensor**: QR code scanning capability (1)
- **Contactless reader options**: Prox, iClass, MIFARE/DESFire, SEOS, HID Prox mobile access
- **Tamper switches**

<table>
<thead>
<tr>
<th></th>
<th>Internal storage capacity: 16 GB Flash, 2GB RAM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- 10,000 user records (2*4 fingers each) for 1:N identification</td>
</tr>
<tr>
<td></td>
<td>- 250,000 IDs in authorized user list</td>
</tr>
<tr>
<td></td>
<td>- 1 Million transaction logs</td>
</tr>
<tr>
<td></td>
<td><strong>Network/Communication</strong>: - Ethernet, RS485, RS422 (2) - Wi-Fi option</td>
</tr>
<tr>
<td></td>
<td><strong>Inputs/outputs</strong>: Wiegand In &amp; Out (customizable up to 512 bits), OSDP, Door relay, 3 CPI (including door monitoring), 3 GPO</td>
</tr>
<tr>
<td></td>
<td><strong>Power supply</strong>: 12 to 24 V DC (2.5A min @12V)</td>
</tr>
<tr>
<td></td>
<td><strong>Power over Ethernet with PoE+ switches</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Operating conditions</strong>: - Temperature: -10°C to 55°C (14°F to 131°F) - Humidity: 10%&gt;80% (non condensing)</td>
</tr>
<tr>
<td></td>
<td><strong>Ingress protection</strong>: IP65 (3)</td>
</tr>
<tr>
<td></td>
<td><strong>HxWxD</strong>: 250<em>152</em>216 mm (9.9<em>6</em>8.5 in)</td>
</tr>
<tr>
<td></td>
<td><strong>Weight</strong>: 2.2 kg (4.85 lb.)</td>
</tr>
<tr>
<td></td>
<td><strong>EMC/Safety standards</strong>: CE, CB, FCC</td>
</tr>
<tr>
<td></td>
<td><strong>RoHS, REACh, and WEEE compliant</strong></td>
</tr>
</tbody>
</table>

References & ordering numbers

<table>
<thead>
<tr>
<th>Marketing name</th>
<th>Regulatory model</th>
<th>Reference number</th>
<th>Contactless authentication factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>MorphoWave® SP MD</td>
<td>MPH-AC007A</td>
<td>293777400</td>
<td>iClass frequency 13.563 MHz</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>MorphoWave® SP MDPI</td>
<td>MPH-AC007B</td>
<td>293777380</td>
<td>Yes</td>
</tr>
<tr>
<td>MorphoWave® SP MDPI-M</td>
<td>MPH-AC007C</td>
<td>293777421</td>
<td>Yes</td>
</tr>
</tbody>
</table>

(1) Printed QR codes only; specifications available on demand
(2) Micro-USB port for terminal configuration or dongle (Wi-Fi) connection
(3) Recommendation for outdoor installation: avoid direct exposure of sensor to rain and sunlight (e.g. place under a canopy)