MSO OEM Series
OEM multipurpose fingerprint modules

Excellent fingerprint image quality: large capture surface, FBI PIV IQS certification
Enrollment, 1:1 verification and 1:N identification capabilities
High accuracy: embedded FIPS 201 and MINEX compliant algorithms

Large internal database capacity: up to 5000 users (2 templates each)
Options: fake finger detection, security features
THE MSO OEM SERIES
(MSO OEM & MSO OEM XX1)

are smart biometric optical devices which allow the rapid integration of biometrics in a wide range of applications requiring a high level of security. They are designed for high-contrast image acquisition, and fast biometric template processing, verification and identification. The MSO OEM & MSO OEM XX1 meet and exceed FBI PIV IQS requirements.

These advanced OEM modules integrate IDEMIA’s algorithms, approved by the FIPS 201 Evaluation Program. IDEMIA’s fingerprint technology is consistently ranked #1 by NIST for accuracy.

A wide range of applications:

- Registration: ID cards, immigration, voting and welfare system, etc.
- ID check as an add-on device for any kind of transaction terminal, PC, PoS, ATM, etc.
- Enrollment stations for access control or time & attendance systems


MSO OEM

MSO OEM XX1

- Versatile devices that carry out both enrollment and comparison (1:1 authentication and 1:N identification)
- Excellent fingerprint capture and processing performance with the largest single fingerprint optical sensor on the market (23x23mm, 500 dpi, 256 grey levels)
  - Authentication < 0.7 sec(1)
  - Identification < 0.9 sec in 1:1000 mode(1)
  - Top grade solution to register young or elderly people, manual laborers (mining, textile, etc.)
- Overall performance certified at the highest levels:
  - FBI PIV IQS / ISO 19794-4: 2011 (image quality)
  - FIPS 201 and MINEX compliant template generator and matcher
- Accurate: the false acceptance rate (FAR) is configurable down to $10^{-8}$ - depending on the security requirements - and maintained regardless of number of users in database
- Robust: the optical sensor technology offers longer life-time and enhanced resistance to electro-static discharges, scratches and shocks. With the entire modules sealed from dust and water, they can be easily integrated into IP65-rated end products
- Large internal database: standard capacity of 500 users (2 fingerprints each), extendable to 3000(2) or 5000(3)
- Multiple template & image formats:
  - ISO 19794-2, ANSI/INCITS 378, and Proprietary
  - ISO 19794-4, WSQ compressed image
- Capable of supporting 2 communication protocols: RS232 or USB interfaces
- Options:
  - Fake finger detection on MSO OEM XX1
  - Security features to protect the communication channel between host and device (integrity check, data encryption)

SOFTWARE PACKAGES

The MSO SDK is available to integrate easily the MSO OEM and MSO OEM XX1 modules into various applications and use their embedded capabilities:

- Available for Windows, Linux and Android Platforms
- Includes a BioAPI interface

NB: Low level protocol (ILV) is also available

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<thead>
<tr>
<th></th>
<th>MSO OEM</th>
<th>MSO OEM XX1</th>
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<tbody>
<tr>
<td>Database capacity (users)</td>
<td>500, 3000(2) or 5000(3)</td>
<td>5000(2) or 10000(3)</td>
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<tr>
<td>Database capacity (templates or fingers)</td>
<td>1000, 6000(2) or 10000(3)</td>
<td>1:500, 1:3000(2) or 1:5000(3)</td>
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<tr>
<td>Matching capability (1:N)</td>
<td>1:500, 1:3000(2) or 1:5000(3)</td>
<td>1:500, 1:3000(2) or 1:5000(3)</td>
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<tr>
<td>Fake finger detection</td>
<td>—</td>
<td>Yes</td>
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<tr>
<td>Security Layer</td>
<td>Optional</td>
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Certifications

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<th></th>
<th>MSO OEM</th>
<th>MSO OEM XX1</th>
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<tbody>
<tr>
<td>FBI PIV IQS / ISO 19794-4: 2011 (Annex. B)</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>FIPS 201 &amp; MINEX compliant algorithms</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>CE, FCC, RoHS</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>WHQL drivers</td>
<td>Yes</td>
<td>Yes</td>
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</table>

(1) Includes detection, encoding and matching
(2) With MSO IDENTLITE license
(3) With MSO IDENTPLUS license

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