MSO 300 Series
Multi-application optical fingerprint sensor

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, smartcard reader, security features
The MSO 300 Series

is a family of high-end optical sensors, based on IDEMIA’s unrivalled experience in the fields of electro-optics and forensic quality fingerprint processing algorithms.

The devices cover a wide range of applications: enrollment, authentication and identification in industrial/commercial and governmental environments.

- **A versatile device that carries 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 (image quality)
  - MINEX compliant algorithms
  - FIPS 201
  - STQC
  - Common Criteria for fingerprint spoof detection (certified by BSI\(^{(2)}\))
- **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
- **Guides the user and automatically controls the image quality** during fingerprint capture
- **Large internal database:** standard capacity of 500 users (2 fingerprints each), extendable to 3000 (with MSO IDENTLITE license) or 5000 (with MSO IDENTPLUS license)
- **Multiple template & image formats:**
  - ISO 19794-2, ANSI/INCITS 378, Proprietary
  - ISO 19794-4, WSQ compressed image
- **Options:**
  - Smartcard reader
  - Fake finger detection (Common Criteria certified)
  - 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 300 sensors 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
- The MSO 300 Series can also be used with MorphoKit™ by IDEMIA, advanced SDK for the capture and processing of fingerprint images, authentication and identification

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<th>MSO 300</th>
<th>MSO 301</th>
<th>MSO 350</th>
<th>MSO 351</th>
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<tbody>
<tr>
<td>Interface</td>
<td>USB</td>
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<tr>
<td>Internal database</td>
<td>From 500 to 5000 users (with licenses)</td>
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<tr>
<td>Fake finger detection</td>
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<td>Yes</td>
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<td>Yes</td>
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<tr>
<td>Smartcard reader</td>
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<td>Yes</td>
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<tr>
<td>Security Layer</td>
<td>Optional</td>
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<td>Certifications</td>
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<td>FBI PIV IQS</td>
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<td>MINEX compliant algorithms</td>
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<td>FIPS 201</td>
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<td>Common Criteria by BSI(^{(2)})</td>
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<td>Yes</td>
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<td>STQC</td>
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\(^{(1)}\) Includes detection, encoding and matching
\(^{(2)}\) BSI = Bundesamt für Sicherheit in der Informationstechnik (German Federal Agency for the Security of Information Technologies)