



# SM-MSO-300

## MorphoSmart 500 ppi Optical Fingerprint sensor (Metal Housing, USB)

### The MSO 300 Series

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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<sup>-8</sup> - 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)

(1) Includes detection, encoding and matching

(2) BSI = Bundesamt für Sicherheit in der Informationstechnik  
(German Federal Agency for the Security of Information Technologies)

### Details

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- 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 (SM-MSO-301 only), smartcard reader, security features

# SM-MSO-300

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### Technical specifications

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#### Technology

Reader type	BioMetric
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#### System

RTE (Request To Exit)	No
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No. of LEDs	2
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#### Interface & connections

Connector type	USB
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#### Tamper type

Pry-off tamper	No
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Opening tamper	No
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#### Operation

Stand-alone	No
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#### Electrical

Power supply type	USB
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#### Physical

Physical dimensions	92x57x80
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Net weight	300 g
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Shipping weight	500 g
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Colour	Grey
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#### Environmental

Operating temperature	0 to +50°C
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Storage temperature	-20 to +70°C
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Relative humidity	10 to 80% noncondensing
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#### Standards & regulation

Compliance	CE, FCC, REACH, RoHS
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