

SM-MSO-300

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

The MSO 300 Series

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)

(1) Includes detection, encoding and matching

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



Details

- 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

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Technical specifications

Technology

Reader type	BioMetric
Read write	No
SAM module embedded	No

System

RTE (Request To Exit)	No
CSN (Card Serial Number)	No
No. of LEDs	2

Interface & connections

Connector type	USB
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Tamper type

Pry-off tamper	No
Opening tamper	No

Operation

Stand-alone	No
PIN keypad	No

Electrical

Power supply type	USB
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Physical

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

Environmental

Vandal proof	No
Operating temperature	0 to +50°C
Storage temperature	-20 to +70°C
Relative humidity	10 to 80% noncondensing

Standards & regulation

Compliance	CE, FCC, REACH, RoHS
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