

Optical Fingerprint Scanner

Model : MFS211 | OEM Sensor Module : MOPvO211

MANTRA



Applications

- Banking
- Corporates
- Public distribution system
- Payment
- Institution
- Merchant Payment
- E-Governance

Features



Scratch free
sensor surface



Latent Finger Detection



Lower FAR and FRR



USB 2.0 interface
with plug and play



500 DPI Optical
fingerprint sensor



Support
Windows, Android, Linux



FBI PIV Certified
Image Quality



IP65 water and dust
Protected Device



Minex Certified High
Performing Fingerprint Algorithm

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The Mantra MFS211 optical fingerprint scanner assures superior image quality, dependability, and compatibility, and is compliant with FBI PIV standards. This device adheres strictly to ANSI 378 and ISO 19794-2 standards, while supporting the WSQ image format. It is eminently suitable for a diverse array of applications, encompassing financial services, E-Governance, public security, and personal computer security. Furthermore, its inclusion of Latent Finger Detection technology facilitates precise and secure fingerprint identification.



At a Glance

Sensor

Parameters	Specification
Fingerprint Sensor Type	: Scratch Free Optical Sensor
Pixel Resolution	: 500 DPI +/- 2%
Sensing Area	: 15.24mm x 20.32mm (0.6 x 0.8 Inch)
Image Size	: 300 x 400 Pixels
Image Grayscale	: 256 (8 - Bit Gray Level)
FRR & FAR	: < 0.1% & < 0.001%
Maximum Acquisition time	: < 2 Sec (Placement to Template)
Capture mode	: Auto Finger detection functionality & Auto capture with built-in quality check (Incorporates NIST quality considerations)
Illumination Source	: RED LED

Security

Parameters	Specification
Crypto operation	: Hardware base RSA2048 Key Generation, AES-GCM-256, SHA-256, TRNG support
Secure Memory	: TEE support by the device. Secure memory support key wrapping feature
Secure Boot	: Secure boot support by the device

Electrical

Parameters	Specification
Protocol	: USB 2.0
Operating Voltage	: 5V ±5% (USB Powered Device)
Operating Current	: Operating Current: < 100 mA & Standby Current : < 50 mA

Environmental

Parameters	Specification
Operating Temperature	: -10°C to +70°C
Storage Temperature	: -20°C to +85°C
Humidity (Operating / Storage)	: < 90% RH, Non-condensing

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Compliant to Following Standard

Parameters	Specification
Biometric Data Interchange Format	: ISO 19794-2 : 2005 & 2011 for minutiae, : ISO 19794-4 : 2005 & 2011 for Image Template in Encrypted mode
*EMI / EMC Compliance	: CE & FCC Part 15B class A
*ESD protection	: Contact Discharge: +/- 8kV, Air Discharge: +/- 15kV
*Environmental, Health and Safety	: RoHS
*Safety	: EN / IEC 62368-1, IS 13252 (Part 1)
*Image Quality	: FBI PIV Certification
*IP Rating	: IP65
*USB Interface	: USB-IF Certified
Device Driver	: WHQL certified

Dimensions

Parameters	Specification
Device Dimensions (L x W x H)	: 68 x 56.5 x 31.5 mm
Device Weight	: 105 grams
Module Dimensions (L x W x H)	: 44.10 x 38 x 28.7 mm
Module Weight	: 35 grams

System Requirements

Parameters	Specification
Operating System	: Windows x86 & x64, Android - 7 & Above
Standard Software/SDK	: MOSIP Compliant

* Certification under process