Optical Fingerprint Scanner
Model : MFS210 | OEM Sensor Module : MOPvO210

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

Optical Fingerprint Scanner
Model : MFS210 | OEM Sensor Module : MOPvO210

The Mantra MFS210 optical fingerprint scanner is known for its excellent image quality, reliability, and compatibility, and it meets FBI PIV standards. It follows ANSI 378 and ISO 19794-2 standards and works with the WSQ image format. This scanner is great for many uses, like in banking, E-Governance, public safety, and computer security. It also has special features for accurately and safely detecting fingerprints.

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 wraping 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

MANTRA

Optical Fingerprint Scanner
Model : MFS210 | OEM Sensor Module : MOPvO210

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, STQC
*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	: UIDAI & STQC Certified L1 RD Service

* Certification under process