

Multi Fingerprint Scanner

MORPHS

MANTRA



Benefits

- IP65 Water and dust protected rugged casing & platen covered by safety cover
- Device can perform indirect or direct sun - light condition (approx 100K Lux)
- Captured image quality certified by FBI's IAFIS Appendix-F & Mobile ID FAP60
- Extra Wide Platen for Easier Capturing

Features



Supports Flat Capture



Rolled fingerprints



WHQL Certified
Device Driver



FBI Appendix-F Certified



USB 2.0, USB-IF Certified



Better User Interface by
LED Indicators



Water & Dust Protected
Rugged Casing



Under Direct Sunlight
up to 100K LUX



Scratch-Free Surface



Interchange
Biometric standard

Multi Fingerprint Scanner

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MORPHS is a portable device designed to capture ten-print fingerprints quickly and accurately. It works well in various environments, including bright sunlight, dusty areas, and on dry or dirty fingers. The device captures both flat and rolled fingerprints, making it ideal for biometric verification, identification, and enrolment applications. MORPHS is certified by the FBI with Appendix F and Mobile ID FAP 60 standards, ensuring high-quality images and seamless integration with Automated Fingerprint Information Systems (AFIS). It is widely used by local and central government bodies, UID-Aadhaar, NPR, National ID projects, and international organisations like the World Bank and UNESCO. With an ergonomic design and an easy-to-integrate SDK, MORPHS is a top choice for system integrators and solution providers.



At a Glance

Sensor

Parameters	Specification
Fingerprint Sensor Type	: Optical Scratch Free Sensor
Pixel Resolution	: 500 DPI +/- 1%
Platen Area	: 3.5 x 3.2 in. (90 x 81 mm)
Capturing Format	: Flat Four fingers , Two thumbs and Rolled fingerprints
Active Platen Area	: 3.2 x 3.0 Inch (81.2 x 76.2 mm)
Finger Image Size	: 1600 x 1500 Pixels
Capturing Speed	: 4 FPS Continuous image capture*
Rolled Capture Area	: 1.6 x 1.5 Inch(40.64 X 38.01 mm)
Rolled Capture Image Size	: 800 x 750 Pixels
Rolled Capture Speed	: 10 FPS Continuous image capture*
Pixel Depth	: 8 Bits/Pixel (256 Gray Level) (size 1 byte)
Capture mode	: Auto capture with built-in quality check (incorporates NIST quality considerations)
Live Finger Detection (LFD)	: ISO 30107-3 Compliant**
Signal to noise ratio	: Both White & Black SNR >= 125
Platen Area Hardness	: 9H compliant Tested as per ASTM D3363
Platen area Abrasion	: 175g, 400 cycles Abrasion test compliant as per ASTM F 2357

Hardware

Parameters	Specification
Interface	: USB 2.0(High speed), USB-IF Certified
Operating Voltage	: 5V +/- 5% (USB Powered Device)
Current Consumption	: Operating : < 350 mA (Max) & Stand By : <80 mA (Max)
Operating Temperature	: 0 to 50 °C
Operating Humidity	: 10-90% RH, non-condensing
ESD protection	: Contact Discharge: +/- 4kV, Air Discharge: +/- 8kV
LED Indicators	: Power, Status, and fingerprint image quality
Dimension	: 173 x 147 x 121 mm
Weight	: 3.6 lbs (1.6 kg)

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Certification

Parameters	Specification
Biometric Data Interchange Format	: ISO/IEC 19794-4:2005 & 2011 for Image Template, WSQ3.1, JPEG2000
EMI / EMC Compliance	: CE & FCC Part 15B Class A, KC Certified
Environmental, Health and Safety	: RoHS
Safety	: EN/IEC 62368-1, IS 13252 (Part 1), UL Certified**
Image Quality	: FBI's IAFIS Appendix-F & Mobile ID FAP60 certified
Ingress Protection Rating	: IP65
Device Driver	: WHQL certified
STQC Certificate	: Yes

Platform

Parameters	Specification
Operating System	: Windows x86 & x64, Android, Linux
Standard Software	: SDK: Morfin_Enroll
Software Features	: NIST compliance WSQ compression module NIST compliance NFIQ Quality check Segmentation of flats into single fingerprint images

*SW API: UIDAI Certified VDM as per latest UIDAI device capture API specification

** Certification under process