

Optical Fingerprint Scanner SM-93

Product Specification

Version 1.0.0

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1. Product Overview

1.1 Brief Introduction

MIAXIS® SM-93 (OEM Module SM-93M) is an FBI-PIV&FAP30 certified Fingerprint Scanner, with adopted optical sensing technology, the larger sensing area (21.4mm×26.4mm) enables it to cover a big surface area and capture efficient biometric data from fingerprints, making it perfect for ID verification and IT security.

This device supports finger image capture, image encryption, Live Finger Detection(LFD), NIST certified interoperable image & template format Standards, Image Compress Standard. Mainstream Windows\Android\Linux SDK available for easy integration into biometric authentication and individual identity verification.

1.2 Application

Widely used for law enforcement, IT security, border administration, and national ID programs.

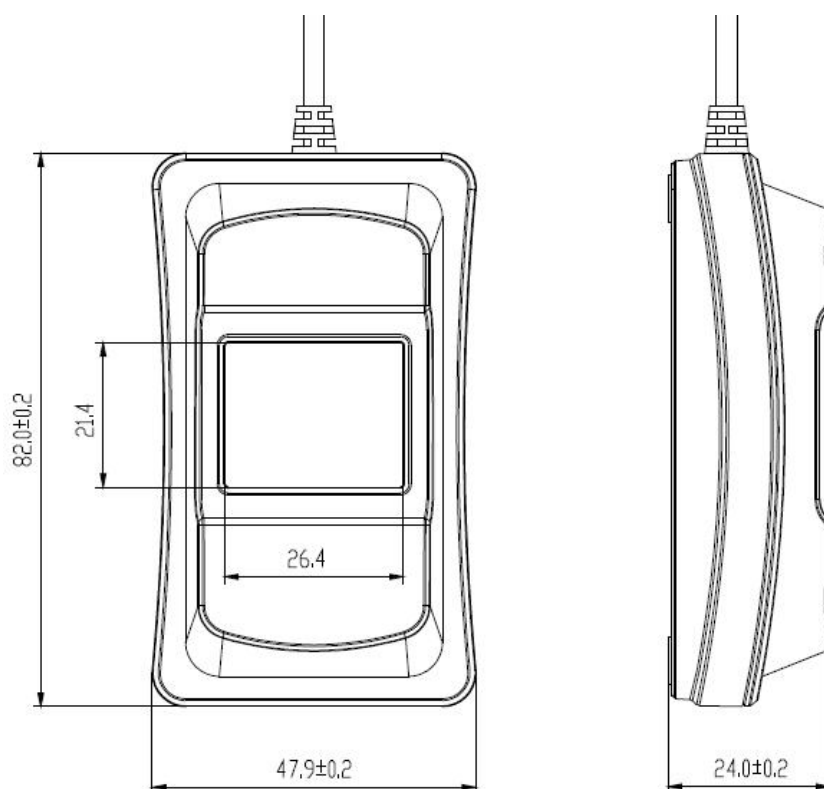
2. Product Specification

2.1 Technical Parameters

Specification	Detail
Product size(L x W x H mm)	82.0×47.9×24.0mm
Sensor Area(L x W mm)	21.4×26.4mm
Weight	95g
Sensor Type	Optical
Image Spec	FBI PIV&FAP30
Image Resolution	500 dpi
Image Size(W x H pixel)	400 x 500 pixel
Grey Scale	8bit, 256 level
Image & Template Format	WSQ,JPEG2000,RAW,BMP,ISO 19794-4, ANSI 381
Quality Score	NFIQ 1.0
Live Finger Detection	Yes
Latent detection	Yes
Enrollment Time	≤0.5s(collect one image and upload by USB)
Max. Encryption Capture	≤4 seconds (Including capture, wsq, encryption and signing &transfer via

Time (MOSIP ,Optional)	USB)
FTM(MOSIP)	SBI 2.0- FTM
Start of capturing	Lamp On
End of capturing	Lamp Off
Supply Voltage	DC5V±5%(USB powered)
Supply Current	≤200mA(USB powered)
Communication Interface	USB
ESD Immunity	±8kV contact discharge, ±15kV air discharge
Operating Temperature	-10°C to +50°C
Storage Temperature	-20°C to +60°C
Operating Humidity	20%RH~90%RH
Ingress Protection	IP65 (Sensor Surface)
Operating System Environment	Linux Kernel 4.15 or higher Windows 7 or higher Android 4.1 or higher

2.2 Mechanical Dimension



Mechanical Dimension (Unit: mm)

2.3 Output interface

The device SM-93 supports standard USB communication interface, with 1.5m length USB cable (cable length optional)



Document Revision History

Document Revision History		
Version	Date	Comment
1.0.0	02/2023	First issue