

FAP60 Fingerprint OEM Module

SM-861

Product Specification

Version: V1.2



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Document Revision History		
Version	Date	Comment
V1.0	3/2023	First issue
V1.1	11/2023	Update the product description and Technical Parameters
V1.2	12/2023	Update Technical Parameters and Mechanical Dimension

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1. Product Overview

1.1 Brief Introduction

MIAXIS® SM-861 is the FBI Appendix F certified, compliant with the MOSIP Registered Device Specification, Ultra slim, and Lightweight FAP60 Fingerprint OEM Module, born for ID authentication system. Combined with MIAXIS® fingerprint algorithm and an advanced TFT technology. MIAXIS® SM-861 supports large area fingerprint capture, meets the FBI FAP60 design requirements, enables capture of super high fingerprint image quality. Ideal for biometric authentication and national identity verification programs.

1.2 Application

Widely used for information security, e-ID, identity verification industries.

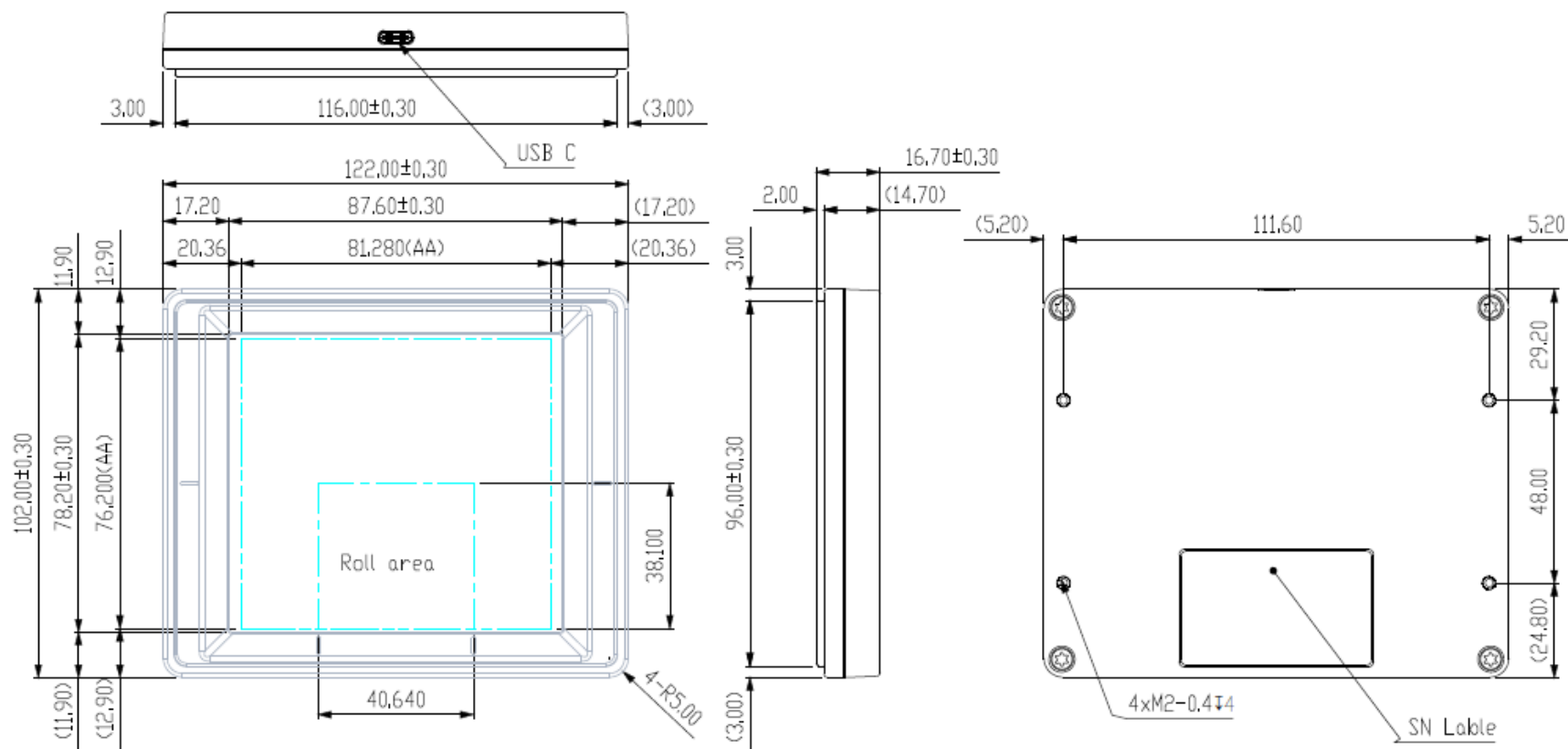
2. Product Specification

2.1 Technical Parameters

Specification	Detail
Dimension (W x L x H)	122mm x 102mm x 16.7mm
Capture Size (W x L)	81.28mm x 76.2mm(4-Finger)
Image Size (W x H)	4-Finger: 1600 x 1500 Rolls: 800 x 750
FPS	≥2(4-Finger) ≥10(Rolls)

Image Quality Standards	FBI IQS Appendix F
Fingerprint Types	Four Finger Flat / Two Finger Flat / Single Flat & Rolls
Image Resolution	500 dpi
Grey Scale	8bit, 256 levels
Image Format	WSQ, JPEG2000, RAW, BMP, ISO 19794-4, ANSI 381
Compression Ratio	Up to 15:1
Quality Score	NFIQ v1.0
Ingress Protection	IP65 (Sensor Surface)
Surface Hardness	9H
Operating Temperature	-10°C to +50°C
Storage Temperature	-20°C to +60°C
Operating Humidity	20%RH ~ 90%RH, non-condensing
ESD Immunity	±8kV contact discharge, ±15kV air discharge
Interface	USB2.0 Type-A
Power Supply	DC5V±5% (USB powered)
Supply Current	≤600mA (USB powered)
Operating System Environment	Android 6 or higher Windows 10 or higher Linux

2.2 Mechanical Dimension



Mechanical Dimension (Unit: mm)

Note: 1. SM-861 can use the USB Type-C Cable (USB 2.0) to communicate with the control of capturing fingerprint image.

2. SM-861 is not equipped with the connecting cable.