

MOXA53

Biometric Handheld Terminal

Where mobility meets security. The MOXA53 is a next-generation biometric handheld terminal designed to put trusted identity verification with fast authentication in the palm of your hand.



RUGGED | INTELLIGENT | ALWAYS READY



Introduction

MOXA53 is a rugged biometric handheld terminal with a 5" display, 5000mAh battery, Powered by Android 12. It supports 3G/4G, Wi-Fi, and Bluetooth, making it ideal for military and government fingerprint collection, real-time registration, and secure biometric encryption. Designed for high-trust environments, MOXA53 ensures secure, reliable mobile identity verification anywhere.

Specification



Hardware & System

CPU	: 2.0 GHz Octa core ARM Cortex A53
Memory	: 2GB LPDDR4 RAM + 32GB eMMC (Optional 4GB + 64GB eMMC)
Micro SD Card	: Micro SD slot supporting up to 256 GB memory card
LCD	: 5" LCD with resolution (1280 X 720) with 16M colors
Touch	: Scratch Resistant Multi-Point Capacitive Touch Screen
Operating System	: 64-bit Android 12 / Android 14 Customized OS (optional)
Front Camera	: 2MP Camera module
Back Camera	: 8MP AF Camera with high-brightness Flash LED for QR/Bar-code and Face recognition
Audio	: High-Quality 1W Speaker for Announcements Omnidirectional MIC
Control Buttons	: 1x Power Button On/Off, Sleep mode, Volume Up/Down button, 1x Function key
Bi-color LED Indicators	: Green On : BAT Full Charge, Red LED ON/Off: BAT Charging
Dimensions (in mm)	: 206 x 86 x 34 mm
Weight	: 410gm



Smart Card Reader

Contact-less card reader	: ISO14443 Type A/B Cards, Mi-fare 1K
NFC (Optional)	

Specification



Fingerprint Sensor

Fingerprint Type	: Scratch Free Optical FAP30 Sensor
Fingerprint FAP30	: Minimum Platen Area: 20.32mm x 25.40mm
Image Specs	: 500DPI, 8 Bit Grayscale
Certifications	: CE, FCC, RoHS*, FBI PIV, EN/IEC 62368-1 , IS13252 Part I



Sensor

Accelerometer	: 3-AXIS Accelerometer
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Interfaces

4G/3G/2G	: 2G GSM/GPRS/EDGE: 850/900/1800/1900 3G WCDMA: B1/B2/B5/B8 4G FDD: B1/B2/B3/B5/B7/B8/B20 4G TDD: B34/B38/B39/B40/B41
Wi-Fi 2.4GHz & 5.0 GHz	: IEEE 802.11 a/b/g/n/ac with Flex antenna
Bluetooth	: BT & BLE 4.0
GNSS	: GPS/Glonass/Beidou, 16 Channel NMEA Compliant with Flex Antenna, AGPS Supported
SIM Slot	: 2 x SIM Slot
SAM Slot	: 2 x SAM Slot
Debug USB	: 1 x USB type C port for PC Connection as debug port and charging
USB Type A	: 1 x USB Type A for an external interface for pen-drive/hard-drive



Electrical

Power Adapter	: Input: 100 to 240V AC, 50/60Hz. Output: 5V, 2A DC
Battery	: Swappable & Rechargeable 5000mAh Li-on battery
Charging Connector	: 1 x Standard DC jack for 5V Power



Environmental

Operating Temperature	: -10°C to +50°C
Storage Temperature	: -10°C to +50°C
Humidity (Operating / Storage)	: < 95% RH, Non-condensing



Certifications

Certification	: CE, FCC, RoHS, BIS, IP54
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*Certification In-Progress

