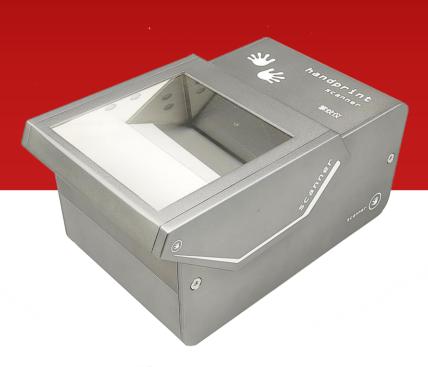# MARKLAND

MFS701

Palmprint Scanner

The MFS501 four-finger scanner produces clear images that fully meet the American FBI FAP 60 image quality requirements, supporting both left and right four-finger scans. The device supports dual thumb flat capture mode, single finger capture for all ten fingers, and single finger rolling capture mode. The scanner meets large-scale national and city-level fingerprint collection needs, providing important technical support and reliable assurance for large-scale public application systems.

- **Ultra-high image quality:** The optical distortion-free fingerprint imaging system provides high-fidelity fingerprint images, which is beneficial for extraction.

- **Powerful collection capabilities:** The large capture window size integrates ten-finger flat, single-finger flat, and single-finger rolling capture in one device.

- **Fast capture speed:** The four-finger scanner captures at least 10 FPS and supports real-time finger detection.

- **High adaptability:** Applicable to various types of fingerprints, automatically clears residual fingerprint marks and halo effects, resulting in higher imaging quality.

- **Durable and shock-resistant:** The device features a sturdy design, wear resistance, strong anti-shock and anti-vandalism properties, and is resistant to electrostatic interference, ensuring a long service life.

- **Easy secondary development:** SDK (Software Development Kit) is provided.

- **Voice control for convenience and intelligence :** Supports a buzzer and voice guidance to guide users through the appropriate finger pressing operations.

MARKLAND DATA SHEET

Product specification

Electrical Parameters	
Supply Voltage	Provided by USB
Operating Current	Typical Value<700mA
Interface	USB2.0
ESD	Contact：±8KV; Air：±15KV

Environmental Parameters	
Operating Temperature	-10℃-55℃
Storage Temperature	-40℃-60℃
Operating Humidity	＜90%R.H（Non-condensing）
Storage Humidity	20～93% R.H

Fingerprint parameters		
Image resolution	500dpi	
Capture window size	≥88.0mm*86.0mm	
Effective image size	Single finger	≥32.5mm*32.5mm
	Four fingers	≥81.2mm*76.2mm
Image pixel count	Single finger	≥640*640 pixel
	Four fingers	≥1600*1500pixel
Capture time	Single finger	≥25 FPS/SEC(≤66ms)
	Four fingers	≥10 FPS/SEC(≤100ms)
Image distortion	≤1%	
Uneven grayscale of image background	≤10%	
Gray level	8-bit,256levels	
Dynamic range of gray level	≥180levels	
Gray value of image background	225~255	
Image defect/pixel defect	No more than 10 pixels with a diameter of 2 within any 600*600 area	
Image center deviation	Deviation between image center and capture window center: X and Y directions both ≤15 pixels	
Weight	1250g	
Dimensions	171*134*104(L*W*H)	

Software parameters	
Image	Image stitching (single finger rolling capture)
	Image segmentation (four-finger planar capture)
Other	Finger position identification