

BIO 600

Ten-Prints Fingerprint Scanner



Android



Windows



Linux



The BIO600 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.



PRODUCT FEATURES

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.

ELECTRICAL PARAMETERS

Supply Voltage:	5.0V±5% Provided by USB
Operating Current	Typical Value<700mA
Interface	USB 2.0
ESD	Contact : ±8KV;Air : ±15KV

ENVIRONMENTAL PARAMETERS

Operating Temperature	-10°C-55°C
Storage Temperature	-40°C-60°C
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 Capture image size	Single finger ≥32.5mm*32.5mm Four fingers 81.2mm*76.2mm

Effective Capture image size	Single finger $\geq 640 \times 640$ pixels Four fingers $\geq 1600 \times 1500$ pixels
Image Distortion	$\leq 1\%$
Uneven grayscale of image background	$\leq 10\%$
Gray level	8-bit, 256 levels
Dynamic range of gray level	≥ 180 levels
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
Scale	$171 \times 134 \times 104$ (Length*Width*Height)
Standard	ISO19794-4, ISO19794-2 ; ANSI378, ANSI381
System	Windows, Android, Linux
NIST	NFIQ1, NFIQ2
Support	Wet and dry fingers
Algorithm	Registration algorithm, Comparison algorithm

SOFTWARE PARAMETERS

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

