SM-621 Optical Fingerprint Verification Module

SM-621 series optical fingerprint verification module is a new released product by Miaxis Biometrics Co., Ltd for the industry market demand of access control system, door lock, time & attendance, safety box or safety cabinet etc. Consisting of high function DSP, large capacity FLASH and color CMOS, etc, it can conduct fingerprint enrollment, image processing, templates storage, fingerprint matching and fingerprint searching.

Product Features:

Strong Functions

Independently conduct the functions of fingerprint enrollment, image processing, minutiae extraction, templates storage, fingerprint verification (1:1) or fingerprint searching (1:N) under the command of HOST(PC or MCU).

Easy Develop

- Module has rich commands, equivalent to fingerprint function base.

- Developers do not need to know the fingerprint verification professional know-how and can develop strong function fingerprint verification application system according to control instructions of SM-621.

Rich Interface

- Power supply: DC 3.6-7V

- Serial communication interface: standard UART protocol, two electricity levels, baud rate alternative

Low consumption Design

- Provide user sleep function control interface, suitable for low consumption condition

Strong adaptability

- Algorithm function of SM-621 module is excellent. It is designed according

to optical imaging theory and has good function of proof and fault-tolerant for poor quality fingerprints.

- Wider suitable people application scope. SM-621 module adopts self-adaptive parameters adjusting mechanism during the fingerprint image reading, thus it makes good imaging quality for dry or wet fingers

Adjustable safety level
- Users can set the different safety level by themselves according to different application condition

Suitable for different application condition
- Easily set the SM-621 module on different work mode according to application system requirement.

- Select module with different fingerprint templates capacity according to the requirement of users' number on different conditions

Product Specifications:

Frame Rate	8 Frames /sec.
Fingerprint enrollment time	＜250ms
Fingerprint search time	＜2.5s (average value for 1776 fingerprints)
Matching Speed	<200ms for 1-to-1 verification
Resolutions	500DPI
Image Size	256x304 pixels
Security level	5, adjustable
Capacity	1776 fingerprints
FAR	＜0.0001%
FRR	＜0.1%
Supply power	3.6V-7V
Working current	<120mA
Peak current	<150mA
Communication interface	TTL(RS232)
Communication Baud rate	38400bps,57600bps,115200bps
Working temperature	-10℃~50℃
Working humidity	45%RH~85%RH (no dew)
Module dimension	56.0×38.5×8.5mm （L*W*H）
Sensor dimension	25×21×55mm （L*W*H）

Product Application Area:

Fingerprint time attendance and access control

Fingerprint safety cabinet and fingerprint lock

IC card system