

AS608 Fingerprint Reader Sensor Module With Cable



AS608 is a fingerprint scanner and reader module but does more than that like fingerprint enrollment, image processing, print matching and many more. It processes the data and sends processed data to the microcontroller through serial. The device uses a DSP chip that does image rendering, feature finding, calculation and searching. It has an in-built flash memory that stores the data of fingerprint and enrolls new – up to 162 fingerprints can be stored. It interfaces with the controller or any other system with TTL serial and sends packets of data to take photos, detects print, hash, and search. The device has a red and green LED light indication for the wrong and right prints.

The module can be easily tested with a window software as well as user can enroll using the software and can see the image of the fingerprint on the computer.

FEATURES:

- Onboard flash memory
- Can store up to 162 fingerprints
- Easy TTL serial interface with controller and other systems
- Green and red LED light indication
- Optical technology
- Compact size
- Can capture images up to resolution 500 dpi

SPECIFICATIONS:

- Voltage supply range: 3.6V to 6V
- Maximum operating current: 120mA
- Peak current: 150mA
- Max Prints imaging time: 1s
- False accept rate (FAR): <0.001%
- False reject rate(FRR): <1.0%
- Interface: UART or TTL serial
- Storage capacity: 162 fingerprints
- Signature file: 256 bytes
- Template file: 512 bytes
- Default baud rate: 57600
- Window area: 14mm x 18mm
- Working temperature: -20°C to 50°C
- working humidity: 40% RH-85%RH

WORKING PRINCIPLE:

- Fingerprint processing includes two processes: fingerprint registration process and fingerprint matching process (in which fingerprint matching is divided into fingerprint comparison (1:1) and fingerprint search (1:N) two ways).
- When the fingerprint is registered, two fingerprints are entered for each fingerprint, and the input image is processed twice. The synthesis module is stored in the module.
- When the fingerprint is matched, the fingerprint sensor is used to input the fingerprint image to be verified and processed, and then it is compared with the fingerprint module in the module (if it is matched with a module specified in the module, it is called fingerprint comparison mode, ie, 1:1 mode. If matching with multiple modules is called fingerprint search, ie 1:N mode, the module gives the matching result (pass or fail).

WIRE CONNECTIONS:

- Black: Ground
- White: NC
- Green: Rx
- Red: Vcc
- Yellow: NC
- Blue: Tx

APPLICATIONS:

- In biometric attendance and registration system
- Biometric door locks like Turnstile and other doors that only allows verified user
- Weapon activation
- Home security system

PACKAGE INCLUDES:

- 1 x AS608 Optical Fingerprint Sensor Fingerprint Module
- 1 x Connecting Cable(6-pin).