

## Adafruit FPM10A Optical Fingerprint Sensor Module



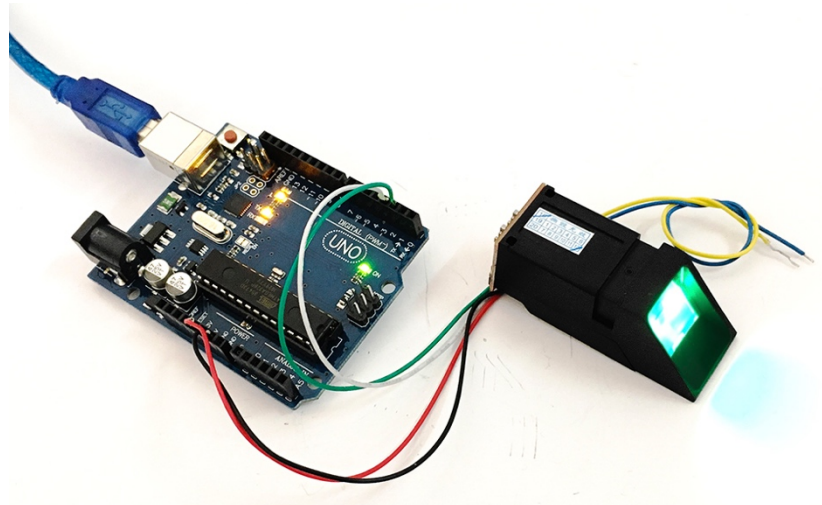
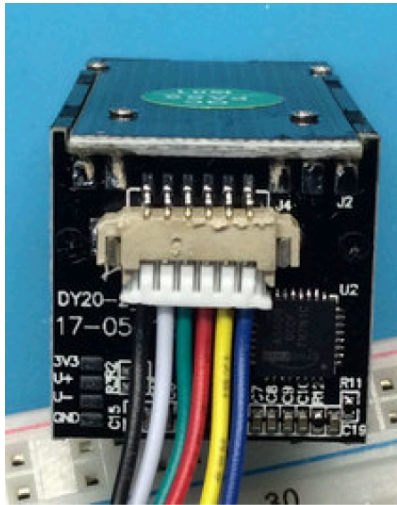
### **Features:**

The Adafruit FPM10A 1000 Point Optical Fingerprint Reader Sensor Module is a serial controlled biometric identification module integrating an optical fingerprint sensor, high speed DSP processor, high performance fingerprint matching algorithm and large capacity onboard flash memory. The module supports fingerprint image acquisition, enrollment, comparison and search with stable performance and fast response time under 1 second. It communicates via UART TTL interface with configurable baud rate and supports storage of up to 1000 fingerprint templates. Designed for embedded biometric systems, it is suitable for security, identity verification and access management applications.

Specifications	
Power Supply Voltage	DC 3.6V to 6.0V
Working Current	Less than 120mA
Peak Current	Less than 140mA
Fingerprint Image Input Time	Less than 1 second
Window Size	14mm x 18mm
Profile Size	256 bytes
Template File Size	512 bytes
Storage Capacity	1000 fingerprints
False Accept Rate FAR	Less than 0.001 percent
False Rejection Rate FRR	Less than 1 percent
Search Time	Less than 1 second, 1 to 500 mean
Interface	UART TTL logic level
Default Baud Rate	57600bps
Configurable Baud Rate	9600 x N, N equals 1 to 12
Operating Temperature	-20C to +50C
Operating Humidity	40 percent RH to 85 percent RH
Storage Temperature	-40C to +85C
Storage Humidity	Less than 85 percent RH
Dimensions	54mm x 20mm x 21mm
Usage	Biometric identification, access control, attendance systems

### **Pinouts:**

Pin Name	Type	Description
GND	Power	Black wire, ground
RX	Input	White wire, serial RX TTL
TX	Output	Green wire, serial TX TTL
VCC	Power	Red wire, 3.6V to 6V supply



**Product Pictures:**

