

FPM-1633K1

Optical Fingerprint Recognition Module

The latest miniature touch sensor

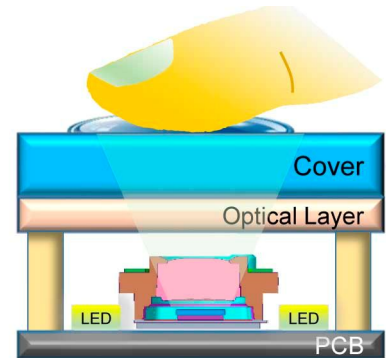
The FPM-1633K1 is the latest miniature touch sensor with extensive enhancements on power consumption and user flexibility. It allows 360-degree rotation, which enables maximum performance without compromising on design aesthetics.



The product integrate optical sensor, light source and touch under cover glass, allowing it to instantaneously capture high resolution images of the fingerprint while rapidly outputting the captured images through the high speed SPI interface to the MCU for recognition algorithm. This range of fingerprint sensor with their advanced optical technology, press instructions, durable structure, high ESD immunity and other features combine to provide designers with a reliable and highly functional sensor for products requiring fingerprint recognition functions.

FEATURE

- Outdoor application (especially rainy day)
- Under glass design and no ESD concern
- Support 2.0mm cover glass
- Anti -scratch and good protection
- Wet finger recognition workable with water pouring and water drop
- Built-in touch and Self-luminous without additional light indicator
- Matching on Chip (MOC)
- Precise Biometrics Biomatch® embedded matching algorithm
- Support hole-less cover (good ID)

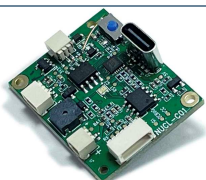


SPECIFICATION

Type	Item	Specification	
Module	Dimension	Ø21.0mm(OD), Ø19.0mm(ID) H=7.1mm (include 1.8mm cover glass & 0.8mm PCB)	
	Weight	6g + 0.05g	
Fingerprint	Supply voltage	3.3V	
	Active Mode Supply Current	67.3mA	
	Effective sensing area	8 mm x 8 mm	
	Resolution	508 dpi	
	Enroll times	8 times	
	FRR / FAR	@FAR=1/50K	
	Storage capacity	30 pieces	
Interface	UART		
baud rate	115200 bps		

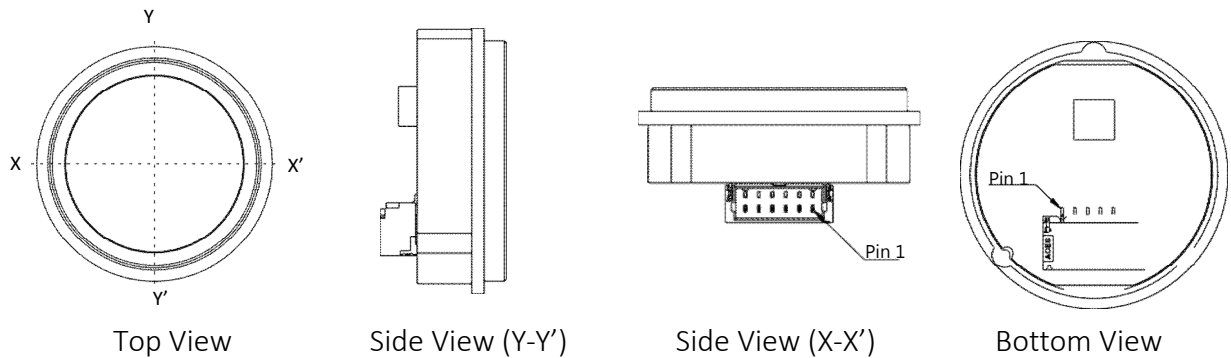
Type	Item	Spec
Touch	Supply voltage	3.3V
	Standby Mode Supply Current	3uA@3.3V
	Trigger	Active high
Light	Exterior color	Green
Environment	Operating Temperature	-30°C~70°C
	Storage Temperature	-40°C~85°C
	Humidity	40% ~ 85% RH under 60°C
	ESD protection	IEC61000-4-2 Air discharge±15KV;Contact discharge±8KV

Ready-made Control Board

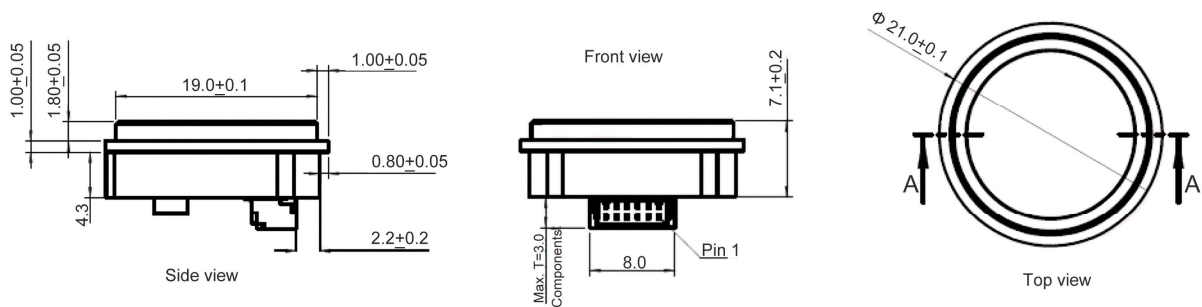


PCB size: 25 x 32 x 1.6mm

MODULE DRAWING



MODULE DIMENSION



DC CHARACTERISTICS

Type	Parameter	Min	Typ	Max	Unit
Fingerprint	Power supply		3.3		V
	Operating current		67.3		mA
	Input high voltage	2.3		3.6	V
	Input low voltage	-0.3		1.0	V
	Output high voltage			3	V
	Output low voltage				V
Touch	Power supply	2.7	5.5		V
	Operating current		1.5		mA
	Standby current(@3.3V)		3		uA
Environment	Operating Temperature	-30	70		°C
	Storage Temperature		85		°C

* Features and specification are subject to change without notice.