Bar code reading engine

MF28-Y

Product Feature

- Rich scenes, suitable for self-service payment embedding, access control integration,etc.

- NFC induction, support for 25 kinds of cards, and long-distance swipe stability.

- Reliable performance, smooth identification of paper and screen QR codes.

- Eye protection design, soft LED, can look straight without glare.

Application Scenarios:

Retail, hospital, daily office, storage and application places; And all kinds of bar code payment, verification of O2O QR code coupons, NFC applications, etc.

MF28-Y/Bar code reading engine

Scan Functions	Image Sensor		640*480 CMOS
	Illumination		White LED
	Symbologies	2D	AztecCode、HANXIN、Maxicode、CodablockF、Data Matrix（DPM）、PDF417、MicroPDF417、QRCode、MicroQR、DOT Code、Grid Matrix
		1D	Codabar、Code 11、Code 128、Code 39、Code 32、Code93 EAN-8、EAN-13、ISSN、ISBN、UPC-A、UPC-E、GS1DataBar GS1-128、Hong Kong 2 of 5、MSI Plessey、Industrial2 of 5、Matrix 2 of 5、Interleaved 2 of 5、Straight 2 of 5 IATA、NEC 2 ISBT128、Telepen
	Resolution*		≥5mil
	Typical Depth of View*	Code39（5mil）	20mm~60mm Bar code size：25mm*10mm
		EAN-13（13mil）	10mm~100mm Bar code size：31mm*17mm
		QR（15mil）	5mm~80mm Bar code size：8mm*8mm
	NFC Scan code distance		0mm-40mm（mean value）
	NFC Card support type		For details, please refer to the User's Manual of EP8280(NFC) Bar Code Reading Engine.
	Symbol Contrast*		≥20%
	Sensitivity**		Roll 70°，Pitch ±70°，Skew ±360°
	View angle		Diagonal 87.1° horizontal 74° vertical 65°
Mechanical/Electric	communication interface		USB/RS232/485/Wigan/TTL
	Size(mm)		61(W)×64.8(D)26(H)㎜
	Weight		30g
	Operation Voltage		4.8VDC-16 VDC
	Current@5.5 VDC	Operation	350mA（5 VDC）
			160mA（5 VDC）
Environmental	Operation Temperature		-20℃~+ 0℃
	Operation Humidity		5%~95%（Non-condensing）
	Ambient Light		0~100,000LUX

Test distance = (minimum depth of field+maximum depth of field)/2; Ambient temperature = 23℃; Ambient illumination =300 LUX incandescent lamp 2D: QR code; 10 Bytes; Minimum strip width =15 mil; PCS=0.8;
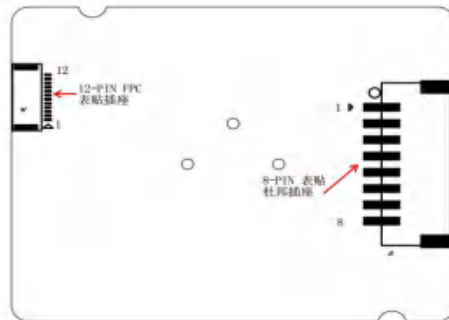
Specification changes without previous notification.

V1.0

Size
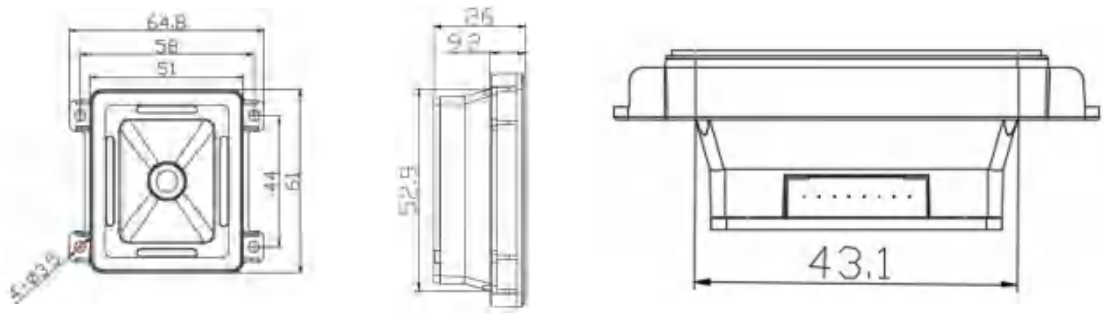
Interface definition

MF28-Y(NFC) scanner data line interface definition (factory default))

12-pin FPC Connector

12-PIN The socket interface is defined in the following table. 4-1, among I = Input, O = Output。

PIN#	Signal Name	I/O	Function	Remark
1	nTRIG	I	Trigger	
2	nRESET	I	Reset	
3	LED	O	LED	
4	Buz	O	Beeper Output	
5	PIN 8	-	NULL	
6	USB_DP	I/O	USB D+ Signal	
7	USB_DN	I/O	USB D- Signal	
8	TXD	O	TTL Send	
9	RXD	I	TTL Receive	
10	GND	-	Ground	
11	VIN	-	5V Power Supply	
12	NC	-		

※ 1. The reserved mode is used to burn image control, and 10KΩ pull-up resistor is added internally. When starting, the PIN 8 is pulled down, the module will enter the state of burning image, and the external proposal is suspended.

8-PIN Box Connector

8-PIN The socket interface is defined in the following table. 4-1, among I = Input, O = Output。

PIN#	Signal	I/O	Function
1	POW_IN	-	5V Power Supply Input
2	GND	-	Power Supply Ground
3	RS232_RX/RS485_B /WG_DATA1	I/O	RS232-RXD/TTL-232-RXD/RS485B-
4	RS232_TX/RS485_A /WG_DATA0	I/O	RS232-TXD/TTL-232-TXD/RS485A-
5	USB_DP	I/O	USB_D+ Signal
6	USB_DN	I/O	USB_D- Signal
7	LED	O	LED
8	nTRIG	I	Trigger