

2D Embedded barcode scanner module

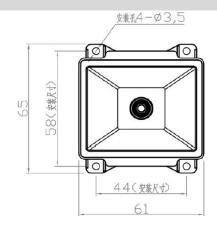
HW-1870 (HD)

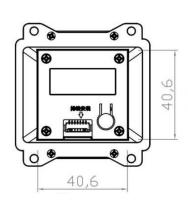
FEATURES & BENEFITS

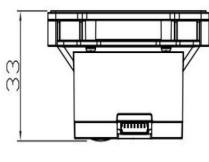
- Global shutter
- 32-bit high performance CPU,1GHz frequency
- Decoding min barcode density:4mil
- Support 1D/2D barcode on paper and screen
- Extremely high sensitivity, quick scanning
- Motion tolerance up to 50cm/s for code128(25mil)
- Interface RS232 and USB(HID,COM)
- Decoding at low and high brightness environment
- Manual, Auto-sensing, Continuous, Host Mode
- Large window, small size, fast convenient installation



Installation Dimensions







Application Scenario



Ticket on bus



Turnstile



Vending machine



Ticket on cinema



Cabinet for logistics



self order machine(KFC)

Technical Specification

HW-1870 Parameters

	Image Sensor	CMOS	
•	Exposure	Global shutter	
	Resolution	300 thousand 640*480pixels 60fps	
Reading performance		Support paper and screen barcodes	
	Decoding capacity	2D: QR,Micro QR,PDF417,Micro PDF417,Data Matrix,Maxicode,	
		Aztec, GM code etc.	
		1D: Code 128, EAN-13, EAN-8, Code 39, UPC-A, UPC-E,	
		Codabar, Interleaved 2 of 5, ITF-6,ITF-14, ISBN, Code 93,	
		UCC/EAN-128,GS1 Databar, Matrix 2 of 5, Code 11, Industrial	
		2 of 5, Standard 2 of 5, Plessey, MSI-Plessey etc. all normal 1D	
	Precision	4mil	
	Light Source	LED(630nm±10nm)	
	View Angle	76.7° (H) x53.4° (V)	
	Scan Angle	Rotation360 $^{\circ}$,tilt \pm 65 $^{\circ}$,skew \pm 65 $^{\circ}$	
	Min Contrast	25%	
	Motion Tolerance	50cm/s Code 128(25mil)	
	IR Sensing	Support	
	Typical DOF	10-90mm(5mil code39) 10-150mm(10mil code39)	
		10-110mm(5mil UPCA) 10-120mm(10mil UPCA)	
		25-150mm(15mil QR) 10-40mm(8mil QR)	
		12-40mm(5mil PDF417) 11-38mm(8mil Data Matrix)	
	Interface	Performance may be impacted by bar code quality and environmental conditions RS232(DB9),USB(HID, COM)	
	Working Voltage	DC 5V	
Mechanical and	Current	360mA(Max) 220mA(working) 5mA(wait)	
electrical	Dimensions	65*61*33mm	
	Weight	35g(without cable)	
	Indication	Buzzer&LED	
	Working Tem	-20~60℃	
	working form		
	Storage Tem	-40~70℃	
Environment Request			
Environment Request	Storage Tem	-40~70℃	

Pin definitions

There are USB and RS232 cable

- 1. USB connector is USB type A, plug and play
- 2. RS232 cable is a DB9 connector(for data)+USB type A connector(for power) DB9 pin order is international standard





RS232 Cable

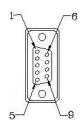
USB/USB COM Cable

Pin definition:

Pin2: RXD (receiving signal)

Pin3: TXD (transmit signal)

Pin5: GND (Ground)



The Pin order

PIN#	Signal Name	I/O	Remarks
1	Shielding net	-	Shielding net
2	GND black	-	Ground
3	+5V red	-	VCC
4	RXD green	Input	RS232 receiver
5	TXD white	Output	RS232 transmission
6	USB_D+ green	Input/Output	USB_D+ signal
7	USB_D- white	Input/Output	USB_D- signal

