

# 2D Embedded barcode scanner module

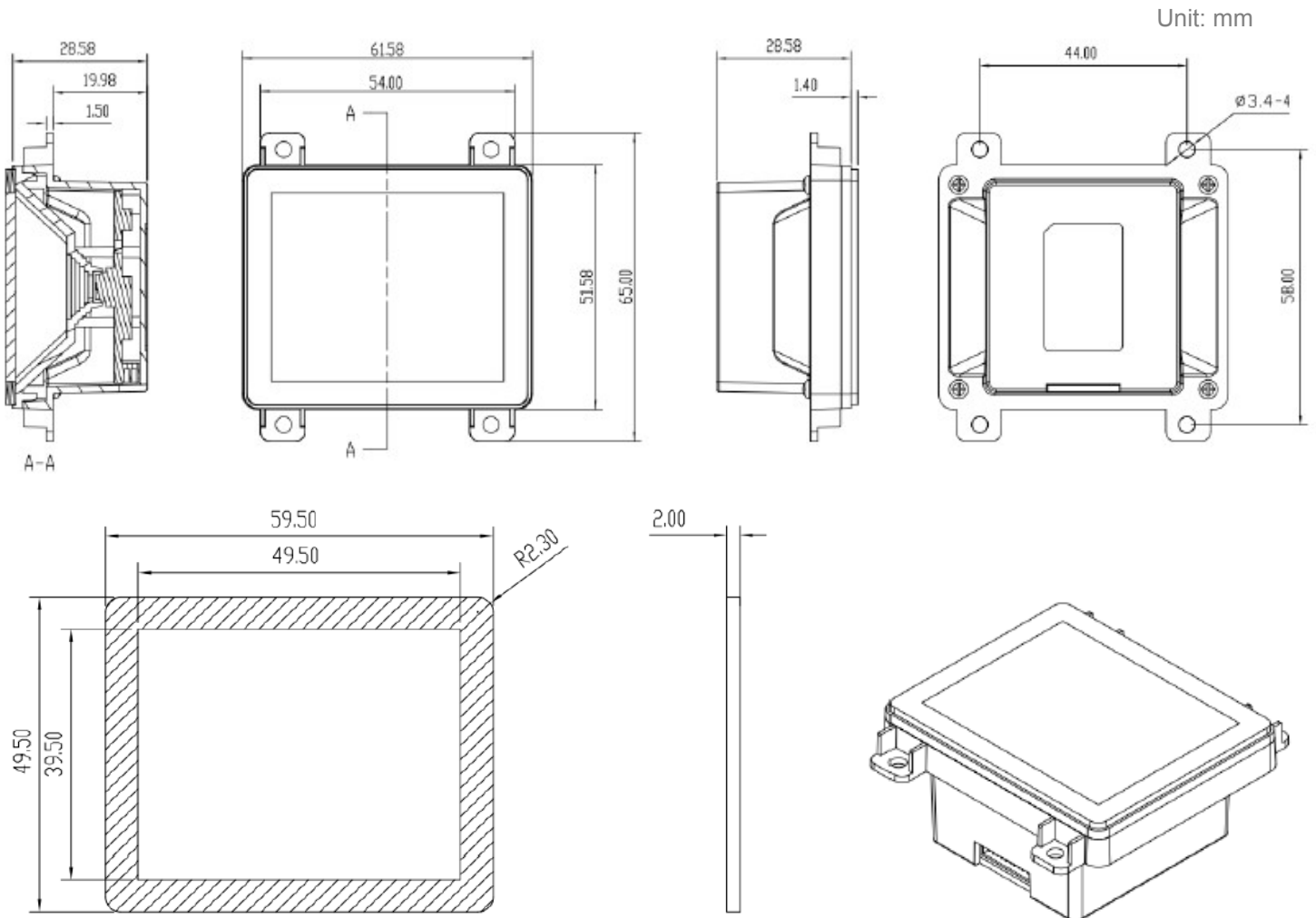
## Senso KSK2

### FEATURES & BENEFITS

- Roller 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
- Interface RS232 and USB(HID, COM), TTL
- Decoding at low and high brightness environment
- Manual, Auto-sensing, Continuous, Host Mode
- Large window, small size, fast convenient installation



### Installation Dimensions



The front cover dimensions

# Interface Definitions

- . Connector spec: pitch 1.25mm/11pin/male
- . Default cable: client end connector is USB-A, Serial port cable can be DB9+USB-A for client end or open wire.

PIN	I/O	Definition	Description
PIN 1	Output	BEE	Control buzzer, high level valid
PIN 2	Input	KEY	Signal trigger, Low level valid
PIN 3	-	USB D-	USB HID or USB COM
PIN 4	-	USB D+	USB HID or USB COM
PIN 5	Output	LED-C	Control Indicator LED, low level valid
PIN 6	Input	RXD	TTL RX 3.3VDC or RS232 5VDC
PIN 7	Output	TXD	TTL TX 3.3VDC or RS232 5VDC
PIN 8	-	EN	floating
PIN 9	-	GND	Ground
PIN10	Input	RESET	Reset pin, low level valid
PIN11	-	+5V	5VDC Power



**Serial port cable**  
TTL OR RS232 signal port

Client End is wire

**USB port cable**  
USB/USB COM signal port

Client End is USB type A

**Serial port cable**  
RS232 signal port

Client End is DB9 CON for data ;  
USB type A for power

# Application Scenario



Ticket on bus



Turnstile



Vending machine

# Technical Specification

## KSK2 Parameters

Reading performance	Image Sensor	CMOS		
	Exposure	Roller shutter		
	Resolution	300 thousand 640*480pixels		
	Decoding capacity	Support paper and screen barcodes		
		2D: QR, MICROQR, PDF417, MICROPDF417, DATAMATRIX, MAXICODE, AZTEC, HANXIN etc.		
		1D: UPC-A, UPC-E, EAN-13, ISBN10, ISBN13, EAN-8, CODE39, CODE 11, CODE 93, CODE128, INTERLEAVED25, INDUSTRIAL25, MATRIX25, S25, CODE 32, TRIOPTIC39, GS1_128, CODABAR, MSI, CHINA POST, TELEPEN, RSS, GS1_DATABAR, GS1_DATABAR_LIM, GS1_DATABAR_EXP etc. all normal 1D		
		Precision	4mil	
	Light Source	LED(630nm ± 10nm)		
	View Angle	76.7° (H) x53.4° (V)		
	Scan Angle	Rotation360° ,tilt±57° ,skew±57°		
	Min Contrast	25%		
	IR Sensing	Support		
	Typical DOF	15-100mm(5mil code39)	15-150mm(10mil code39)	
15-110mm(5mil UPCA)		15-120mm(10mil UPCA)		
	25-150mm(15mil QR)	15-150mm(8mil QR)		
	12-110mm(5mil PDF417)	11-130mm(8mil Data Matrix)		
Performance may be impacted by bar code quality and environmental conditions				
Mechanical and electrical	Interface	RS232(DB9), USB(HID, COM),TTL232		
	Working Voltage	DC 5V		
	Current	150mA(Max)	90mA(working)	1mA(standby)
	Dimensions	65*61*29mm		
	Weight	35g(without cable)		
	Indication	Buzzer & LED		
Environment Request	Working Tem	-30~65°C		
	Storage Tem	-40~70°C		
	Humidity	5%-95%(Non-condensing)		
	Light Immunity	0~100,000Lux		
	Drop Test	1.8M(6ft)		