ACS-QR04:Ultra long QR Reader 2D Scanner

The EM55 barcode reading engine is a dual-lens advanced optical design.

Intelligent image recognition technology is applied to provide high performance, high reliability, wide depth of field coverage, and long-range

A reading product that switches quickly at close range.

EM55 can support reading under strong light and provide effective instructions.

Support scanning paper codes.

EM55 has rich interfaces, (dual models) can support USB, Ethernet, RS48

5, RS232, TTL, etc., support most application scenarios.

The EM55 does not provide aiming instructions. As long as the barcode is within the effective reading angle and depth of field,

It can be read within the range.

ÿAppearance

diagram

Non-network version (USB+RS485+RS232+TTL)

ÿ 10 PIN interface (1.25mm pitch, buckle)

Pin No.	Signal Name	Type	Description
1	VIN	Power	5~16V (default 12V) power supply
2	GND		land
3	RxD		ground input/output TTL serial port receiving
4	TXD		Output TTL serial port transmission
5	D-		Bidirectional USB data cable negative pole
6	D+		Bidirectional USB data cable positive
7	A		Bidirectional RS485 Data A
8	B		Bidirectional RS485 Data B
9	TX-RS232		Output RS232 Output
10	RX-RS232		Input RS232 Input

ÿInstallation

Electrostatic Discharge (ESD)

The product has been designed to protect against static electricity, but you still need to take anti-static measures during unpacking and use.

Measures such as grounding wrist strap and grounding the work area.

Dust and dirt proof

The product must be sufficiently sealed during storage and use to prevent the accumulation of dust, particles or other contaminants.

Dust particles or pollutants can reduce engine performance and even affect engine performance.

Use of the engine.

Thermal Considerations

Heat is generated during operation. When the system is running continuously at full speed for a long time, the heat will accumulate and cause

The temperature of the decoding chip increases. Although it can adapt to work in a high temperature environment, it will increase the

Image noise reduces image quality and reading performance.

It is recommended to first test whether the possible reduction in reading performance is within an acceptable range, and then determine whether appropriate

Heat dissipation design.

The design should reserve space for natural or forced convection.

Wrap with heat-insulating material such as rubber.

If the window needs to be tilted, the requirements are the same as for parallel installation. The tilt angle should ensure that no light can be reflected into the lens.

Various light beams are used to ensure reading performance.

Window material and color

The choice of window material and color should take into account the wavelength of light that can be responded to (mainly white light band) so that the light

The line transmittance is as high as possible, while ensuring the blur is as low as possible and the refractive index is uniform. Usually,

PMMA or optical glass, the white light transmittance of the window material is greater than 90%, and the blur is less than 1%.

Whether or not an anti-reflective coating is used depends on the specific material and application.

Window Scratch Protection and Coating

Scratches and dirt on the window will reduce the reading performance. It is recommended to consider anti-scratch and anti-fouling in the design of the window.

Choose highly wear-resistant materials or use wear-resistant coatings on the mouth material.

Ambient Light

Better performance in ambient light and good adaptability

50~60Hz Common lighting alternating current fluorescent flicker, but when used in a high-frequency pulse flash environment, the performance

May be reduced due to interference.

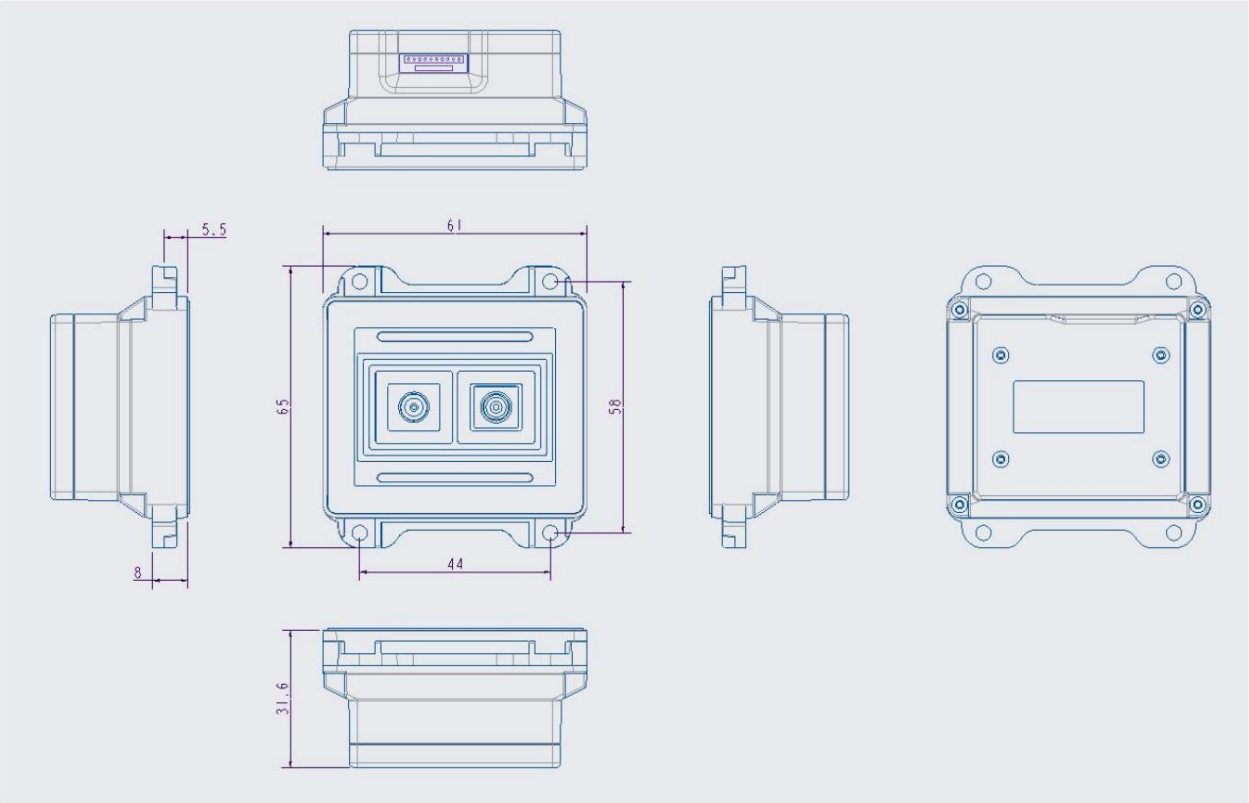
Eye safety

No laser light source is used, only white light emitting diodes (LEDs) are used for illumination.

The wavelength range of light generated by this method is safe. However, you should still avoid looking directly at the LED during use.

Or direct the light beam towards people's eyes to avoid causing discomfort.

3. Dimensions



ÿReading **angle of view**

The size of the window is designed to ensure that the viewing area is not blocked.

Near: 59° *46° Far: 43° *27°

ÿ Specifications

Sensor	CMOS sensor, pixels: 0.3M + 1M Global Shutter LED Red/
Illumination	RED LED
Rotation / Tilt / Yaw **Roll / Pitch / Yaw**	360 / ±65 / ±69 degrees (unit) (10cm from the test code) 360 / ±65 / ±69 degreeÿunitÿ
Motion Tolerance **Motion Tolerance**	Maximum 130.83 cm/sec (48mil QR) (30cm from the test code) Up to 130.83cm per second for 48mil QR
Power/Current **Voltage / Current**	5.0VDC±5% / 211mA(max),193mA(working),124mA(standby),80mA(sleeping) 5.0VDC±5% / 211mA(Max.),193mA(work), 124mA(Standby), 80mA(dormancy)
Code	1D: Codabar,Code 128,EAN128,ISBT128,Code 39,Code 32,Code 93,Interleaved 2 of 5,Industrial 2 of 5,EAN-13,ISBN/ISSN,EAN-8,UPC-A,UPC-E,UPC-E1,Matrix 2 of 5,GS1 Databar,GS1 Databar Limited,MSI Plessey,Standard 2 of 5 2D: QR Code,Data Matrix,PDF417
Typical Performance* **Typical Performance**	49mil QR (3-150cm) [26mm WeChat payment QR code] 49mil QR (3-170cm) [35mm **Alipay payment QR** code] 45mil QR (5-140cm) [35mm paper parking code] *The test was conducted on a 6.7-inch mobile phone with maximum brightness.
Operating temperature **Operating temperature Storage temperature** **Storage temperature**	-20°C ~ +60°C -40°C ~ +85°C
Working humidity **Humidity**	5% ~ 95% (non-condensable) 5% ~ 95% (non-condensing)

ÿFactory **default settings:**

Interface	**USB HID, RS485, USB COM and TTL UART, RS232, Ethernet**
Enabled Codes	1D:Code 128 2D: QR Code

*Test environment: ambient temperature = 23ÿ; ambient illumination = 300 LUX incandescent lamp;

** Typical depth of field distance is related to test environment and barcode quality

Specifications subject to change without notice