



RT870

EMBEDDED 2D BARCODE SCANNER

RT870 is RTscan's new OEM 2D kiosk 2d barcode scanner in 2019, It's also "upgrade version" of RT830B as we improved the performance for reading bar codes in paper ticket / card, and now this RT870 performs excellent for bar code reading both from cell phone screen and paper. Designed for embedded use, it is suitable for all kinds of Kiosk, ATM, ticket terminal, turnstile and medical devices. It is outstanding for its high speed motion tolerance ($>2\text{m/s}$) and capacity to decode almost all types of bar codes, including QR code, Aztec, MaxiCode, Data Matrix, PDF417, EAN code, etc.

It detects and reads bar code automatically, with USB-HID, USB-Virtual Com and RS232 interfaces.



Applications:

- Self-service kiosks
- Ticket vending machines
- Access control gates & turnstiles
- Transportation (ticketing of bus, metro...)
- Loyalty cards
- Car park ticket machines

Features:

- Sensitive detection and fast reading
- Fixed mount design for embedded use
- Can read from LCD screen and paper
- Detect and read barcode automatically
- Support most 1D and 2D bar codes
- Large field of view

Mechanical

Dimensions (LxWxH)	77mm x 66mm x 45mm
Weight	75 g

Electrical

Voltage	5 VDC±10%
Operating current	200mA (Typical), MAX:450mA
Light Source	illumination: 6500k LED
Host System Interfaces	USB HID-KBW, USB virtual COM, RS232

Environmental

Operating Temperature	-40°C to 70°C
Storage Temperature	-50°C to 85°C
Humidity	0% to 95% relative humidity, non-condensing
Drop	withstand 1.2 m drops
Ambient Light	0 to 100,000 lux

Scan Performance

Scan Pattern	Area Imager
Optical Resolution	CMOS 640*480 pixels
Motion tolerance	>2sm/s
Resolution	≥5mil
Symbol Contrast	20% minimum reflectance difference
Scan Angle	Roll: 360°, Pitch: ±65°, Skew: ±60°
Field of View	Horizontal 72°, Vertical 64°
Decode Capability	2D: QR Code, Micro QR, Aztec, PDF417, Micro PDF417, Data Matrix, Maxicode , etc 1D: Code 128, EAN-13, EAN-8, Code39, Code93, Marix 2 of 5, Codabar, Interleaved 2 of 5, GSI dataBar, etc.

Decode Ranges

20mil QR Code	0mm-100mm
13mil UPCA	5mm-110mm
10mil Data Matrix	0mm-50mm
6.88mil PDF417	0mm-50mm

Performance may be impacted by bar code quality and environmental conditions.

