# LIRTscan 



RT207

Super Small OEM 2D Barcode Scanner Engine

The RT207 is outstanding for ultra small design $(21 \times 9.2 \times 8 \mathrm{~mm})$, low power consumption, good performance for even poor printed 1D/ 2D bar codes and for on-screen bar codes even if the screen is covered with protective film or the screen with low brightness level, with TTL232 interface.

Its specially suitable for devices with small space inside, for example: POS, PDA, or other kinds of portable device, but of course, can be used for big devices such as kiosk terminals.


## Features:

- High performance: even for poor printed bar codes or read from lower brightness smart phone screen.
- Ultra small.
- TTL232 interface.
- Low power consumption, more durable.
- Readable most 1d 2d QR PDF417, Data Matrix codes.
- Suitalbe for mobile device like PDA, POS and others small device.
- Flexible Integration: the decoder board and the imager can beseparately mounted, which provides flexibility for integration into small space.


## Specification:

Mechanical

| Dimensions $(\mathrm{DxWxH})$ | Imager: $(21 \times 9.2 \times 8) \mathrm{mm}$. Decoder board: $(21 \times 21 \times 1) \mathrm{mm}$ |
| :--- | :--- |
| Weight | 15 g |

## Electrical

| Operation Voltage | $3.0-3.6$ VDC |  |
| :--- | :--- | :--- |
| Operating Power | 140 mA (typical) | 181 mA (max.) |
| Standby current | 8 mA |  |
| Current when sleep | $<10 \mathrm{uA}$ |  |
| Interfaces | TTL-232, USB (HID-KBW) |  |
| Light source | Red LED $625 \pm 10 \mathrm{~nm}$ |  |

Environmental

Operating Temperature
Storage Temperature
Humidity
Ambient light
$-20^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
$-40^{\circ} \mathrm{C}$ to $80^{\circ} \mathrm{C}$
$5 \%$ to $95 \%$ relative humidity, non-condensing
0 to 100,000 lux

Scan Performance

Scan Pattern Area Imaging
Image sensor
Field of view
Symbol Contrast
Pitch, Skew,rotate
Warranty
Decode Capability

648*480 pixels CMOS, resoltion $\geq 5 \mathrm{mil}$ Horizontal $44^{\circ}$, Vertical $33.2^{\circ}$
$\geq 30 \%$ reflectance difference
Pitch: $\pm 50^{\circ}$, Skew: $\pm 55^{\circ}, 360^{\circ}$
1 year factory warranty
1D: Code128, UCC/EAN-128, AIM-128, EAN-8, EAN-13, ISBN/ISSN, UPC-E, UPC-A, Interleaved 2 of 5, ITF-6, ITF-4, Matrix 2 of 5, Industrial 25, Standard 25, Code 39, Codabar, Code 93, Code 11, Plessey, MSI-Plessey, GS1-DataBarTM(RSS), (RSS-14, RSS-Limited,RSS-Expand) 2D: PDF417, QR Code (QR1/2, Micro), Data Matrix (ECC200, ECC000, 050, 080, 100, 140)

## Decode range

| Code $39(5 \mathrm{mil})$ | $30 \mathrm{~mm}-180 \mathrm{~mm}$ |
| :--- | :--- |
| EAN-13 $(13 \mathrm{mil})$ | $45 \mathrm{~mm}-380 \mathrm{~mm}$ |
| PDF417 | $30 \mathrm{~mm}-125 \mathrm{~mm}$ |
| QR code | $25 \mathrm{~mm}-165 \mathrm{~mm}$ |
| Data Matrix | $20 \mathrm{~mm}-115 \mathrm{~mm}$ |

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

