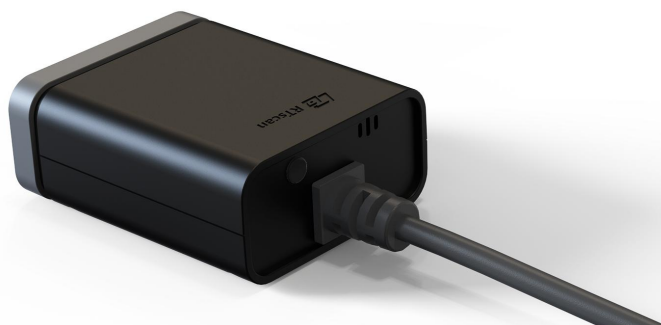# RT241

Fixed Mount 2D Barcode Scanner

The RT241 is outstanding at its special design, laser accurate aiming, and its excellent performance for decoding almost 1d&2d bar codes, even poor quality barcodes: QR codes, Aztec, Maxicode, EAN-13, EAN-8, UPC-A, UPC-E, Code128, Code 39, Codabar, UCC/EAN 128, RSS, ITF-14, ITF6, Standard 2 of 5, etc. With a square and cross aiming, users can accurately and easily point to the barcodes and achieve quick reading, to make a better experience.

It is suitable for all kinds of applications:
ATM, Locker, Kiosks, Express cabinets, Ticket gates, and other types of self-service terminals.

In order to meet the different needs of different applications,
RT241 is divided into four versions in terms of resolution and reading distance:
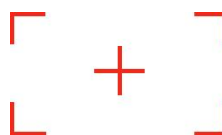RT241-SR, RT241-SD, RT241-ER and RT241-HD. Please refer to the following specs table.

¦ Easy mounting design

The RT241 comes with an (optional) mounting bracket which enables you to embed the scanner with your devices very easily. It facilitates your design and save your development time.

¦ Square & Cross aimer

With a square and cross laser aimer, users can accurately and easily point to the barcodes and achieve quickly reading. This makes a better user experience. For safety purpose, the laser light is IEC 60825-1 certificated.

¦ Special design to protect users eyes

The scanner comes with an cover (optional) which prevents the scanner's lights from shooting into the human eyes.

¦ Excellent Bar Code Reading Performance

Great performance to read most types of 1d /2d bar codes from paper and screen. Meanwhile, it can easily read even poor quality bar codes: damaged bar codes, low contrast bar codes, torn bar codes, etc.

Performance	Image Sensor	RT241-SR/RT241-SD: 640 * 480 CMOS RT241-ER/RT241-HD: 720 * 1280 CMOS			
	Illumination Aiming	White LED Cross laser			
	Symbologies	2D		PDF417 , QR Code, Data Matrix, Aztec, Maxicode	
		1D		EAN-13, EAN-8, UPC-A, UPC-E, Code128, Code 39, Codabar, UCC/EAN 128, RSS, ITF-14, ITF6, Standard 2 of 5, Matrix 2 of 5, Industrial 2 of 5, Plessey, MSI Plessey, Code 11,Code 93, etc.	
	Resolution	For 2D: ≥5mil , 1D: ≥5mil , (differ from different type bar codes)			
	Typical Depth of Field	Version	RT241-SR	RT241-SD	RT241-ER	RT241-HD
		Code 128(5mi)	40-210mm	30-65mm	130-350mm	60-170mm
		Code 39(5mil)	40-220mm	35-70mm	100-360mm	65-200mm
		PDF417(5mil)	60-130mm	20-70mm	120-230mm	60-190mm
		DM(10mil)	50-90mm	30-55mm	130-230mm	85-120mm
		QR(20mil)	35-230mm	35-120mm	50-400mm	30-80mm
	Scan Mode	Sense mode, Continuous mode, Command trigger mode			
	Scan Angle	Roll: 360°, Pitch: ±55°, Skew:±55°			
	Field of View	Horizontal 42°, Vertical 32°			
	Min. Symbol Contrast	25%			
Mechanical/ Electric	Interface	USB-HID/ USB-CDC by itself; RS232 is optional			
	Dimensions	40.83(W)×50(D)×20(H)mm			
	Weight	63g			
	Notification	Beep, LED indicator			
	Operating Voltage	5.0VDC $\pm$ 5%			
	Current @ 5VDC	RT241-SR/RT241-SD: operating : < 190mA; standby: < 0.5mA; RT241-ER/RT241-HD: operating : < 230mA; standby: < 1mA;			
Environmental	Operating Temperature	-20℃ to 60℃			
	Storage Temperature	-40℃ to 70℃			
	Humidity	5% to 95% (non-condensing)			
Accessories (optional)	Development kit board:	USB RS232(optional)	USB virtual Com or USB-HID. DB9 RS232 used to connect the RT241 to a host device.		
Four Versions Available	Version:	Description:	Example:		
	RT241-SR	Standard Range: The standard scanner	QR Code(20mil): Readable distance: 35-230mm		
	RT241-ER	Extended Range: Able to read bar codes from a longer distance	QR Code(20mil): Readable distance: 50-400mm Code128(30mil): 200-1300mm		
	RT241-SD	Short Distance: Able to read bar codes from a short distance	Data Matrix (4*4mm): Readable distance: 22-70mm QR Code(4*4mm):18-75m		
	RT241-HD	High-Definition: It can read high-density bar codes	High-density barcode that is hard to read by usual scanners		