RT218
Small Barcode Scan Engine

1D 2D

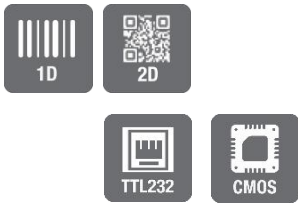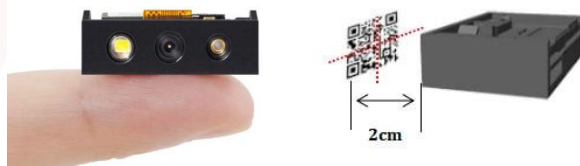TTL232 CMOS

The RT218 is outstanding at its super compact design, laser accurate aiming, and its excellent performance for decoding almost 1d&2d bar codes: 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.

It is suitable for all kinds of small terminals:
PDA, POS, Tablet, Notebook, Bluetooth ring scanner, Bluetooth pocket scanner, etc.

In order to meet the different needs of different applications,
RT218 includes four versions in terms of resolution and reading distance:
RT218-SR, RT218-SD, RT218-ER and RT218-HD. Please refer to the following specs table.

¦ Compact and Lightweight Design

The miniature size, light weight and seamless integration of imager and decoder board facilitates the integration of the barcodes scan engine RT218 into a wide variety of thin-and-light equipment.

¦ Square & Cross aimer

With a square & 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.

¦ Four Versions Available for Different Distance & Resolution.
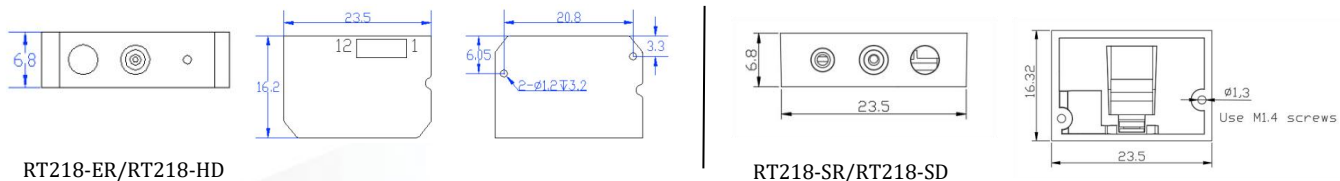
RT218 includes 4 versions:
RT218-SR: the standard scanner.
RT218-SD: reads barcodes from a short distance.
RT218-ER: reads barcodes from a longer distance.
RT218-HD: reads high-density barcodes.
For example, RT218-SD can read a 5*5mm QR code as close as 1.8cm.

¦ Excellent Bar Code Reading Performance

Great performance to read most types of common 1D and 2D bar codes from paper and phone screen. This scan engine can also easily read even poor quality barcodes: damaged barcodes, low contrast barcodes, torn barcodes, warped or wrinkled barcodes.

Performance	Image Sensor	RT218-SR/RT218-SD: 640 * 480 CMOS RT218-ER/RT218-HD: 720 * 1280 CMOS			
	Illumination	White LED			
	Aiming	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		RT218-SR	RT218-SD	RT218-ER	RT218-HD
		Code128(5mil)	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
		Data Matrix(10mil)	50-90mm	30-55mm	130-230mm	85-120mm
		QR Code(20mil)	35-230mm	35-120mm	50-400mm	30-80mm
	Scan Mode	Sense mode, Continuous mode, Command trigger			
	Scan Angle	Roll: 360°, Pitch: ±55°, Skew:±55°			
	Field of View	Horizontal 42°, Vertical 32°			
	Min. Symbol Contrast	25%			
Mechanical/ Electric	Interface	TTL-232 by itself; USB or RS232 by EVK board			
	Dimensions	23.5(W)×16.32(D)×6.8(H) mm (max.)			
	Weight	3g			
	Notification	Beep, LED indicator			
	Operating Voltage	3.3VDC ± 5%			
	Current @ 3.3VDC	Trigger mode: operating : 160mA; standby: 25.5mA; peak (power on): 360mA Sense mode: operating : 160mA; standby: 124.5mA; peak (power on): 360mA			
Environmental	Operating Temperature	-30℃ to 70℃			
	Storage Temperature	-40℃ to 80℃			
	Humidity	5% to 95% (non-condensing)			
Accessories (optional)	Development kit board:	USB	USB virtual Com or USB-HID; equipped with a trigger button, beeper and USB interfaces.		
		RS232(optional)	DB9 RS232 kit board; equipped with a trigger button, beeper, and RS232 interface, power adapter		
Four Versions Available	Version	Description		Example	
	RT218-SR	Standard Range: The standard scanner		QR Code(20mil): Readable distance: 35-230mm	
	RT218-ER	Extended Range: Able to read bar codes from a longer distance		QR Code(20mil): Readable distance: 50-400mm Code128(30mil): 200-1300mm	
	RT218-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	
	RT218-HD	High-Definition: It can read high-density bar codes		High-density barcode that is hard to read by usual scanners	

Mechanical mounting dimensions (unit: mm)

RT218-ER/RT218-HD

RT218-SR/RT218-SD