



## ES20 2D Scan Engine All In One

### Specification:

Scanning Performance	Image sensor		CMOS sensor with 640*480 pixels
	Illumination		White light LED
	Focusing		Red light LED
	Symbologies	2D	(PDF417)、(Micro PDF417)、(QR Code)、(Micro QR)、(Data Matrix)、(Aztec)、(Hanxi code)
		1D	(Codabar)、(Code 39)、(Code 32)、(Interleaved 2 of 5)、(Industrial 2 of 5)、(Matrix 2 of 5)、(Code 93)、(Code 11)、(Code 128)、(GS1-128)、(ISBT 128)、(UPC-A)、(UPC-E)、(EAN/JAN-8)、(EAN/JAN-13)、(Qlessey)、(GS1 DataBar(RSS14))、(Standard 2 of 5)、(Msiplessey)
	Precision*		≥5mil

	Typical reading depth of field*	EAN-13 (13mil)	45mm~300mm (Bar code size : 31mm*7mm)
		PDF417 (6mil)	50mm~150mm (Bar code size : 14mm*7mm)
		Code39 (5mil)	60mm~150mm (Bar code size : 27mm*8mm)
		Data Matrix (10mil)	25mm~260mm (Bar code size : 5mm*5mm)
		QR Code (15mil)	25mm~230mm (Bar code size : 10mm*10mm)
	Symbol contrast*		≥20%
	Bar code sensitivity**		Pitch ±70°, Skew ±70°, Roll 360°
	View angle		Horizontal 41°, Vertical 31°
Mechanical/ Electrical Parameters	Interface		TTL、USB
	Dimension(mm)		22mm(W)×14.5mm(D)×11.7mm(H)(Max.)
	Net Weight		3g
	Working voltage		3.3 VDC±5%
	Rated power		810mW (Typical value)
	Current@3.3 VDC	Working	245mA(RMS Typical values), 320mA(RMS Max.)
		Standby	30mA
Environment al Parameters	Operating temperature		-10°C~+60°C
	Storage temperature		-40°C~+70°C
	Operating humidity		5%~95% (No condensation)
	Ambient lighting		0~100,000LUX
Optional Accessories List	Development board		Development board with trigger button and buzzer, with RS232 and USB
	Cable	USB	USB cable, used to connect the development board and information receiving host
		RS-232	RS232 cable, used to connect the development board and information receiving host

\* Test conditions: ambient temperature =23°C; Ambient illumination =300 LUX incandescent lamp; The paper code shall use the test sample code formulated by our company.

\*\* Test conditions: Test distance = (minimum depth of field + maximum depth of field) /2; Ambient temperature =23°C; Ambient illumination =300 LUX incandescent lamp.