



EM3396
OEM scan engine

FEATURES

Advanced technology.

Armed with Newland's fifth-generation of UIMG technology, the scan engine can decode even poor quality barcodes with ease. EM3396 is equipped with the laser aimer.

Miniature and ultralight form factor.

Ultra-compact, light and integrator-friendly, the EM3396 caters for miniaturization needs of OEM applications.

Multi-interface.

The EM3396 supports USB and TTL-232 interfaces to meet diverse customer needs.

Two-in-one design.

Seamless integration of image sensor and decoder board makes the scan engine small, lightweight and easy to fit into even the most space-constrained equipment.

Outstanding power efficiency.

The advanced NLDC technology incorporated in the scan engine helps reduce the power consumption and prolong the service life of the device.

Application Scenarios

Self-service cabinets used in e-commerce • express delivery services • smart homes • ATMs • kiosks
• queue machines • lottery machines • certificate makers.

Performance	Image Sensor	752×480 CMOS		
	Illumination	Red LED 625nm±10nm		
	Aiming	Laser diode 650nm		
	Symbologies	2D	PDF417, Data Matrix (ECC200, ECC000, 050, 080, 100, 140), QR Code, Chinese Sensible Code	
		1D	Code 128, EAN-13, EAN-8, Code 39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ITF-6, ITF-14, ISBN, Code 93, UCC/EAN-128, GS1 Databar, Matrix 2 of 5, Code 11, Industrial 2 of 5, Standard 2 of 5, Plessey, MSI-Plessey, etc.	
	Resolution*	≥3mil		
	Typical Depth of Field*	EAN-13	60mm-290mm (13mil)	
		Code 39	55mm-165mm(5mil)	
		PDF 417	55mm-135mm (6.7mil)	
		Data Matrix	55mm-130mm (10mil)	
		QR Code	45mm-175mm (15mil)	
	Symbol Contrast*	≥20%		
	Scan Angle**	Roll: 360°, Pitch: ±55°, Skew:±55°		
	Field of View	Horizontal 36°, Vertical23°		
Mechanical/	Interface	TTL-232, USB		
Electrical	Rated Power Consumption	468mW (typical)		
	Operating Voltage	3.3VDC±10%		
	Current @3.3 VDC	Operating	142mA (typical), 204mA (max.)	
		Idle	11mA	
		Sleep	<100uA	
Dimensions	21.5(W)×15.3(D)×11.8(H)mm (max.)			
Weight	5g			
Environmental	Operating Temperature	-20°C to 55°C (-4°F to 131°F)		
	Storage Temperature	-40°C to 70°C (-40°F to 158°F)		
	Humidity	5%~95% (non-condensing)		
	Ambient Light	0~100,000lux		
Certifications	FCC Part15 Class B, CE EMC Class B			
Accessories	NLS-EVK	Software development board, equipped with a trigger button, beeper and RS-232 & USB interfaces.		
	Cable	USB	Used to connect the NLS-EVK to a host device.	
		RS-232	Used to connect the NLS-EVK to a host device.	
	Power Adaptor	DC5V power adaptor, used to provide power for the NLS-EVK.		

*Test conditions: T=23°C; Illumination=300lux using incandescent lamp; sample barcodes made by Newland.

Version: V1.3

**Test conditions: Scan Distance=(min. DOF + max. DOF)/2; T=23°C; Illumination=300lux using incandescent lamp; 2D: QR Code;10 Bytes; Resolution=15mil; PCS=0.8.

Specifications are subject to change without notice.

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