

# EM3296

#### **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.

Miniature and ultralight form factor.

Ultra-compact, light and integrator-friendly, the EM3296 caters for miniaturization needs of OEM applications.

Multi-interface.

The EM3296 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 and smart homes; ATMs; kiosks; queue machines; lottery machines; certificate makers.



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Performance	Image Sensor		640×480 CMOS
	Light Source		Red LED 625±10 nm
	Symbologies	2D	PDF417, QR Code (QR1/2, Micro), Data Matrix (ECC200, ECC000,
			050, 080, 100, 140), Chinese Sensible Code
		1D	Code128, UCC/EAN-128, AIM128, 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,
			$Plessey,MSI\text{-}Plessey,GS1\text{-}DataBar^{TM}(RSS),(RSS\text{-}14,RSS\text{-}Limited,RSS\text{-}14)$
			RSS-Expand)
	Resolution		≥5mil
	Typical Depth of Field	EAN-13	45mm-370mm (13mil)
		Code 39	35mm-170mm (5mil)
		Data Matrix	30mm-120mm (10mil)
		QR Code	30mm-150mm (15mil)
		PDF 417	40mm-120mm (6.67mil)
	Symbol Contrast		≥30% reflectance difference
	Scan Angle**		Roll: 360°, Pitch: ±50°, Skew: ±60°
	Field of View		Horizontal 44°, Vertical 33.2°
Mechanical/ Electrical	Interface		TTL-232, USB (HID-KBW, COM Port Emulation, HID-POS)
	Operating Voltage		3.0~3.6VDC
	Current@3.3VDC	Operating	175mA
		Standby	8mA
		Sleep	<5uA
	Dimensions		21.2(W)×14(D)×11.1(H)mm
	Weight		4g
Environmental	Operating Temperature		-20°C~+50°C ( -4°F~122°F )
	Storage Temperature		-40°C~+70°C ( -40°F~158°F )
	Humidity		5%~95% (non-condensing)
	Ambient Light		0~100000lux (natural light)
Accessories	NLS-EVK3000		Software development board for the EM3296, equipped with a
			trigger button, beeper and RS-232 & USB interfaces.
	Cable	USB	Used to connect the EVK3000 to a host device.
		RS-232	Used to connect the EVK3000 to a host device.
	Power Adaptor		Used to provide power for the EVK3000.
	Fower Adaptor		

<sup>\*\*</sup>Test conditions: Code 39; 3 Bytes; Resolution=10mil; W:N=3:1; PCS=0.8; Barcode Height=11mm; Scan Distance=120mm; T=23°C; Illumination=200lux.

Version: V1.1

<sup>\*</sup>Specifications are subject to change without notice.\*