

# NLS-EM3296

## OEM Scan Engine

- ◆ **UIMG<sup>®</sup> Technology**
- ◆ **All-in-One Design**
- ◆ **Miniature and Ultralight Form Factor**
- ◆ **Outstanding Power Efficiency**
- ◆ **Multiple Interfaces**



## Features

### ■ **UIMG<sup>®</sup> Technology**

Built with Newland's fifth-generation of **UIMG<sup>®</sup>** technology, the scan engine can decode even poor quality barcodes with ease.

### ■ **Miniature and Ultralight Form Factor**

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

### ■ **Multiple Interfaces**

The NLS-EM3296 supports USB and TTL-232 interfaces to meet diverse customer needs.

### ■ **All-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 **NLD<sup>™</sup>** technology incorporated in the scan engine helps reduce the power consumption and prolong the service life of the device.

## Application Scenarios (as an accessory)

PDA's, POS terminals, tablets and other thin lightweight mobile devices.

## OEM Scan Engine

<b>Performance</b>	Image Sensor	640×480 CMOS	
	Illumination	Red LED 625±10 nm	
	Aiming	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	Code 128, 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-Plessey, GS1-DataBar™(RSS), (RSS-14, RSS-Limited, RSS-Expand)
	Resolution*	≥4mil	
	Typical Depth of Field*	EAN-13	50mm-365mm (13mil)
		Code 39	40mm-165mm (5mil)
		Data Matrix	35mm-115mm (10mil)
		QR Code	35mm-145mm (15mil)
		PDF 417	45mm-115mm (6.67mil)
	Symbol Contrast*	≥25%	
	Scan Angle**	Roll: 360°, Pitch: ±50°, Skew: ±50°	
	Field of View	Horizontal 44°, Vertical 33.2°	
<b>Mechanical/ Electrical</b>	Interface	TTL-232, USB (HID-KBW, COM Port Emulation, HID-POS)	
	Rated Power Consumption	437mW (typical)	
	Operating Voltage	3.3 VDC±10%	
	Current@3.3VDC	Operating	141mA (typical), 198mA (max.)
		Standby	10mA
		Sleep	<10uA
	Dimensions	21.8(W)×15.3(D)×11.8(H)mm (max.)	
Weight	4g		
<b>Environmental</b>	Operating Temperature	-20°C to 50°C (-4°F to 122°F)	
	Storage Temperature	-40°C to 70°C (-40°F to 158°F)	
	Humidity	5% to 95% (non-condensing)	
	Ambient Light	0~100,000lux	
<b>Certifications</b>	FCC Part15 Class B , CE EMC Class B		
<b>Accessories</b>	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 Adapter	DC5V power adapter used to provide power for the NLS-EVK	

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

\*\*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.\*

Version: V1.3

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