NLS-EM3000
OEM Scan Engine

The NLS-EM3000 OEM scan engine, powered by advanced imaging technology and Newland patented **UIMG®** technology, a computerized image recognition system, can read barcodes on various mediums such as paper and plastic, with excellent motion tolerance.

The NLS-EM3000 supports both mainstream 1D and standard 2D barcode symbologies (e.g., PDF417, QR Code, Data Matrix) as well as Chinese Sensible Code and GS1-DataBarTM (RSS) (Limited/Stacked/Expanded versions).

This compact, lightweight engine fits easily into even the most space-constrained equipments such as cash registers, data collectors, meter readers, ticket validators and PDAs.

The NLS-EM3000's high-performance processor, in conjunction with the supplied APIs and SDK, provides greater ease in application development.

Features:

- **Two-In-One Design**
  Seamless integration of CMOS image sensor and decoder board makes the engine small, lightweight and easy for integration.

- **Superior Decoding Performance**
  Delivers speedy and accurate scanning performance and supports mainstream 1D/2D barcode symbologies.

- **Ease of Application Development**
  The provided SDK and APIs allow software developers to conveniently create their own applications.

Specifications

Performance		
Image Sensor		752×480 CMOS
Illumination		Red LED 625±10 nm
Symbologies	**2D**	PDF417, QR Code, Data Matrix, Chinese Sensible Code, Aztec Code, Maxicode, MicroPDF417*, etc.
	1D	Code128, EAN-13, EAN-8, Code39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ITF-6,ITF-14,ISBN, Code 93, UCC/EAN-128, GS1 Databar, GS1 Composite Code, Matrix 2 of 5, Code11, Industrial 25, Standard 25, Plessey, MSI-Plessey, etc.
	OCR*	ID cards, passports
Reading Precision		≥ 5mil
Depth of Field	**Code 39**	50mm -135mm(10mil); 70mm~170mm(15mil)
	PDF417	55mm -145mm(10mil); 70mm~160mm(15mil)
	Data Matrix	40mm -120mm(10mil); 60mm~145mm(15mil)
	QR Code	40mm -115mm(10mil); 60mm~150mm(15mil)
Symbol Contrast		≥ 25%
Scan Angle **		Roll: 360° ; Pitch: ±50°; Skew: ±50°
Field of View		Horizontal 36°; Vertical 23°

Mechanical/Electrical		
Interface		TTL232
Operating Voltage		3.3 ~3.6VDC
Current @ 3.3VDC	**Maximum Current**	400 mA
	Operating Current	300 mA
	Idle Current	65 mA
Dimensions		28.0(W)×24.5(D)×13.5(H) mm
Weight		10.1g

Environmental	
Operating Temperature	-20℃ to +45℃
Storage Temperature	-40℃ to +60℃
Humidity	5% to 95% (non-condensing)
Ambient Light	0 ~ 100000 lux (natural light)

Certifications
FCC Part15 Class B, CE EMC Class B

Accessories		
NLS-EVK3000		Software development board for the NLS-EM3000, equipped with a trigger button, beeper and RS-232 & USB interfaces.
Cable	**RS232 Cable**	Used to connect the NLS-EVK3000 to a host device; equipped with a power connector.
	USB Cable	Used to connect the NLS-EVK3000 to a host device.
Power Adaptor		Used to provide power for the NLS-EVK3000. Output: DC5V, 2A; Input: AC100~240V, 50~60Hz.

*Standard EM3000 does not support Micro PDF417 or OCR, whereas customized EM3000 supports both.

**Test conditions:

Code39, 3 Bytes; Resolution=10mil; W:N=3:1; PCS=0.8; Barcode Height=11mm; Scan Distance=120mm; T=23℃; Illumination=200 lux

Contact Us

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