

## **NLS-EM20-80**

## **OEM Scan Engine**

















#### **Features**

#### ■ Snappy On-screen Barcode Capture

Featuring excellent near-field reading, wide-viewing angle and snappy reading, the CPU-powered NLS-EM20-80 is incredibly reader-friendly on smartphone & tablet displays.

## ■ Robust Design with High Vibration Resistance

The single PCB construction and vibration-proof connectors make the scan engine more resistant against vibration and help improve its reliability.

#### **■** Multiple Interfaces

The NLS-EM20-80 supports USB, RS-232 and

#### **■** Slimmer, More Compact Construction

Compared with its predecessor, the new generation of NLS-EM20 is thinner, lighter and more compact, and thus easier to be integrated into any devices.

#### Outstanding Power Efficiency

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

#### **Application Scenarios** (as an accessory)

Bus POS terminals, VTMs, self-service cabinets used in e-commerce, express delivery services and smart homes, kiosks, automatic queuing machines, vending machines, etc.

# NLS-EM20-80

### **OEM Scan Engine**

#### **SEANNING MADE SIMPLE**

Performance _	Image Sensor		640 * 480 CMOS		
	Illumination		White LED		
	Symbologies		PDF 417, QR Code, Mic	cro QR, Data M	atrix, Aztec, Maxicode,
		2D	Chinese Sensible Code, GM Code, Micro PDF417 Code, Code One  EAN-8, EAN-13, UPC-E, UPC-A, Code 128, UCC/EAN128, I2Of5, ITF-14, ITF-6, Matrix 25, CodaBar, Code 39, Code 93, ISSN, ISBN, Industrial 25, Standard 25, Plessey, Code11, MSI-Plessey, UCC/EAN Composite, GS1 Databar, Code 49,		
		1D			
			•	Composite, G	S1 Databar, Code 49,
		Code 16K			
	Resolution*		≥5mil		
	Typical Depth of Field*	EAN-13	25mm-110mm (13mil)	PDF417	35mm-45mm (6.7mil)
		QR Code	0mm-90mm (15mil)	Data Matrix	35mm-50mm (10mil)
		Transport C		38mm-135mr	n
	Min. Symbol Contrast*		30%		
	Scan Angle**			360°, Pitch: ±40°, Skew: ±45°	
	Motion Tolerance*	Hangzhou T	ransport Code:	110cm/s (max	<b>(</b> )
		Wechat Pay	Pay: 260cm/s (max)		x)
	Field of View		Horizontal 68°, Vertical 51°, Diagonal 84.8°		
Mechanical/	Interface	TTL-232, RS-232, USB			
Electrical	Operating Voltage		12-pin FPC connector: 3.3-5VDC±5%		
			4-pin box connector: 3.3-5VDC±5%		
	Rated Power Consumption@5VDC		1129mW (typical)		
	Current@5VDC	Operating	237mA (typical), 319m	A (max.)	
		Idle	69mA		
	Rated Power Consumption@3.3VDC		1103mW (typical)		
	Current@3.3VDC	Operating	335mA (typical), 479mA (max.)		
		Idle	93mA		
	Dimensions		61.5(W)×65.5(D)×31.9(I	H)mm (max.)	
	Weight		33g		
	Notification		Beeper, Green LED Indicator		
Environmental .	Operating Temperature		-40°C to 60°C		
	Storage Temperature		-40°C to 75°C		
	Humidity		5% to 95% (non-condensing)		
	Ambient Light		0~100,000lux (natural light)		
Certifications			FCC Part15 Class B, CE	E EMC Class B	
Accessories -	NLS-EVK		Software development board for the NLS-EM20-80, equipped		
			with a trigger button, beeper and RS-232 & USB interfaces.		
	Cable USB		Used to connect the NLS-EVK to a host device.		
		Used to connect the NLS-EVK to a host device.			
	Power Adapter	DC5V powe	r adapter to power the NL	S-EVK with RS	S-232 cable.

<sup>\*</sup>Test conditions: T=23°C; Illumination=300lux using incandescent lamp; sample printed barcodes made by Newland,

**Newland Europe** 

+31(0)-345-87-0033

Specifications are subject to change without notice

Newland China

+86-591-83978605

Version: V1.1

Newland Korea

+82-10-8990-4838

Newland Latin America

+1-239-598-0068

**Newland Taiwan** 

+886-2-7731-5388

**Newland North America** 

+1-510-490-3888

WeChat Pay QR code on a 5.5" Android smartphone with brightness set to 100%.

<sup>\*\*</sup>Test conditions: Scan Distance=(min. DOF + max. DOF)/2; T=23°C; Illumination=300lux using incandescent lamp;

<sup>2</sup>D: QR Code; 10 Bytes; Resolution=15mil; PCS=0.8.