

# 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 TTL-232 interfaces to meet diverse customer needs.

#### ■ 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.

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SCANNING MADE SIMPLE

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<b>Performance</b>	Image Sensor	640 * 480 CMOS		
	Illumination	White LED		
	Symbologies	2D	PDF 417, QR Code, Micro QR, Data Matrix, Aztec, Maxicode, Chinese Sensible Code, GM Code, Micro PDF417 Code, Code One	
		1D	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, Code 16K	
	Resolution*	≥5mil		
	Typical Depth of Field*	EAN-13	25mm-110mm (13mil)	
		QR Code	0mm-90mm (15mil)	
		PDF417	35mm-45mm (6.7mil)	
		Data Matrix	35mm-50mm (10mil)	
	Min. Symbol Contrast*	30%		
	Scan Angle**	Roll: 360°, Pitch: ±40°, Skew: ±45°		
	Field of View	Horizontal 68°, Vertical 51°, Diagonal 84.8°		
<b>Mechanical/ Electrical</b>	Interface	TTL-232, RS-232, USB		
	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), 319mA (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(H)mm (max.)		
	Weight	33g		
	Notification	Beeper, Green LED Indicator		
<b>Environmental</b>	Operating Temperature	-40°C to 65°C (-40°F to 149°F)		
	Storage Temperature	-40°C to 75°C (-40°F to 167°F)		
	Humidity	5% to 95% (non-condensing)		
	Ambient Light	0~100,000lux (natural light)		
<b>Certifications</b>	FCC Part15 Class B, CE EMC Class B, RoHS			
<b>Accessories</b>	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.	
		RS-232	Used to connect the NLS-EVK to a host device.	
	Power Adapter	DC5V power adapter to power the NLS-EVK with RS-232 cable.		

\*Test conditions: T=23°C; Illumination=300lux using incandescent lamp; sample printed barcodes made by Newland, WeChat Pay QR code on a 5.5" Android smartphone with brightness set to 100%.

\*\*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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### Newland Headquarter

Add: NO.1 Rujiang West Rd.,  
Mawei, Fuzhou, Fujian 350015, China  
Tel: +86 591 8397 9500  
Email: info@nlscan.com  
Web: www.newlandaidc.com

### Newland APAC

**Taiwan** Tel: +886 2 7731 5388  
Taiwan Email: info@newland-id.com.tw  
Web: www.newland-id.com.tw  
**Japan** Tel: +886 2 7731 5388 ext. 71  
**Korea** Tel: +82 10 8990 4838  
**India** Tel: +91 120 7964266  
Japan/Korea/India Email: info@nlscan.com  
Web: www.newlandaidc.com

### Newland NALA

**North America** Tel: +1 510 490 3888  
North America Email: info@nlscan.com  
**Latin America** Tel: +1 239 598 0068  
Latin America Email: info@newlandla.com  
Web: www.newlandamerica.com

### Newland EMEA

Tel: +31 (0) 345 87 00 33  
Email: sales@newland-id.com  
Tech Support: tech-support@newland-id.com

