

NLS-EM20

OEM Scan Engine

- ◆ **UIMG® Technology**
- ◆ **Two-In-One Design**
- ◆ **Low Power Consumption**
- ◆ **Multi-Interface**
- ◆ **Snappy On-Screen Barcode Capture**



Features

■ **UIMG® Technology**

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

■ **Snappy On-Screen Barcode Capture**

The NLS-EM20 can capture on-screen barcodes effortlessly even when the screen is covered with protective film or set to its lowest brightness level.

■ **Multi-Interface**

The NLS-EM20 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 for integration.

■ **Low Power Consumption**

The advanced **NLD** technology incorporated in the scan engine promises low power consumption and prolonged service life.

Application Scenarios (as an accessory)

Self-service cabinets used in e-commerce, express delivery services and smart homes; ATMs; kiosks; queue machines; lottery machines; certificate makers.

OEM Scan Engine

Performance	Image Sensor		752×480 CMOS	
	Light Source		White LED	
	Symbologies	2D		PDF417, QR Code (QR1/2, Micro), Data Matrix (ECC200, ECC000, 050, 080, 100, 140)
		1D		Code128, UCC/EAN-128, AIM-128, 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		≥5mil	
	Typical Depth of Field	EAN-13		10mm-55mm (13mil)
		PDF 417		15mm-35mm (6.67mil)
		Data Matrix		15mm-40mm (10mil)
		QR Code		10mm-50mm (15mil)
	Symbol Contrast		≥30% reflectance difference	
Scan Angle**		Roll: 360°, Pitch: ±40°, Skew: ±40°		
Field of View		Horizontal 80°, Vertical 56°		
Mechanical/	Interface		TTL-232, USB (HID-KBW, COM Port Emulation, HID-POS)	
Electrical	Operating Voltage		3.0~5.5VDC	
	Current@5VDC	Operating	160mA	
		Sleep	12mA	
	Dimensions		65.1(D)×61.1(W)×43.6(H)mm	
	Weight		41.5g	
Environmenta	Operating Temperature		-20°C~+60°C (-4°F~140°F)	
	Storage Temperature		-40°C~+80°C (-40°F~176°F)	
	Humidity		5%~95% (non-condensing)	
	Ambient Light		0~100000lux (natural light)	
Accessories	USB Cable		Used to connect the NLS-EM20 to a host device.	

**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=300lux.

Specifications are subject to change without notice.

Version: V1.0