NLS-EM20

OEM Scan Engine

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

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.

◘ **Multiple Interfaces**

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 NLDC 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
	Illumination		White LED
	Symbologies	2D	PDF417, Data Matrix (ECC200, ECC000, 050, 080, 100, 140), QR Code
		1D	Code 128, EAN-13, EAN-8, Code 39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ITF-6, ITF-14, ISBN, Code 93, UCC/EAN-128, GS1 Databar, Matrix 2 of 5, Code 11, Industrial 2 of 5, Standard 2 of 5, Plessey, MSI-Plessey, etc.
	Resolution*		≥4mil
	Typical Depth of Field*	EAN-13	20mm-45mm (13mil)
		PDF 417	20mm-30mm (6.7mil)
		Data Matrix	20mm-35mm (10mil)
		QR Code	20mm-40mm (15mil)
	Symbol Contrast*		≥20%
	Scan Angle**		Roll: 360°, Pitch: ±30°, Skew: ±40°
	Field of View		Horizontal 80°, Vertical 56°
Mechanical/ Electrical	Interface		TTL-232, USB
	Rated Power Consumption		752mW (typical)
	Operating Voltage		3.3~5.5VDC
	Current@5VDC	Operating	198mA (typical), 236mA (max.)
		Standby	16mA
		Sleep	10mA
	Dimensions		65.2(W)×61.2(D)×44.5(H)mm
	Weight		41.5g
Environmental	Operating Temperature		-20℃ to 55℃ (-4°F~131°F)
	Storage Temperature		-40℃ to 70℃ (-40°F~158°F)
	Humidity		5% to 95% (non-condensing)
	Ambient Light		0~100,000lux
Certifications			FCC Part15 Class B，CE EMC Class B
Accessories	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 Adaptor		DC5V power adaptor, used to provide power for the NLS-EVK.

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

**Test conditions: Scan Distance=(min. DOF + max. DOF)/2; T=23℃; Illumination=300lux using incandescent lamp;
　　　　　2D: QR Code; 10 Bytes; Resolution=15mil; PCS=0.8.

Specifications are subject to change without notice.　　　　　　　　　　　　　　　　　　　　　　　　　　　　　Version: V1.1

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