







NLS-EM50S-10

OEM SCAN ENGINE

FEATURES

O Superior Scanning Performance

Armed with Newland's sixth-generation of **UIMG®** technology, this CPU-based scan engine delivers stunning performance on decoding even poor-quality and damaged barcodes.

O All-in-One Design

Ultra-compact, light and integrator-friendly, the scan engine caters for miniaturization needs of OEM applications.

Multiple Interfaces

The NLS-EM50S-10 supports USB and TTL-232 interfaces to meet diverse customer needs.

Megapixel CMOS

Thanks to its 1280×800 pixel CMOS sensor, the NLS-EM50S-10 is able to capture high resolution images and decode high density barcodes.

User-friendly Illumination & Aiming

Designed with the end user in mind, the NLS-EM50S-10 employs highly visible laser aimer to achieve crisp and accurate targeting while using flicker-free white soft illumination to reduce eye strain and fatigue from long-time operation.













NLS-EM50S-10

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Image Sensor

Illumination		White LED
		650nm laser
Symbologies	2D	PDF417, Micro PDF417, QR / Micro QR, DataMatrix, Aztec, Chinese Sensible Code, Maxicode,
		GridMatrix, Code One, DotCode
	1D	EAN, UPC, Coupon, GS1 Composite, CodaBar, Interleave 25 / ITF-14 / ITF6, Matrix 25, Industrial
		25, COOP 25, Standard 25, China Post 25, Code 39, Code 93 / Code 93i, Code 128 series,
		Plessey, MSI Plessey, Code11, RSS, Code 49, Code 16K
	Postal	USPS Postnet, USPS Intelligent Mail, Royal Mail, USPS Planet, KIX, Australian Postal, Japanese
		Post
	OCR	Passport OCR, Passport Visa, TD1, TD2, etc.
Resolution*		≥3mil
Typical Depth of Field*	EAN-13	70mm-500mm (13mil)

1280 * 800 CMOS

Typical Depth of Field* EAN-13 70mm-500mm (13mil)
Code 39 90mm-265mm (5mil)
PDF417 70mm-225mm (6.7mil)
Data Matrix 65mm-215mm (10mil)

QR Code 40mm-295mm (15mil)

Min. Symbol Contrast*

Scan Angle**

Roll: 360°, Pitch: ±60°, Skew: ±60°

Field of View

Horizontal 42°, Vertical 28°

Physical

 $\begin{array}{cc} \text{Interface} & \text{TTL-232, USB} \\ \text{Operating Voltage} & 3.3 \text{VDC} \pm 5 \% \end{array}$

Current@3.3VDC Operating 269mA (typical), 399mA (max.)

Idle <70mA Sleep <1mA

Dimensions $21.7(W) \times 14.7(D) \times 11.9(H) \text{ mm (max.)}$

Weight

Environmental

Operating Temperature -20°C to 60°C (-4°F to 140°F)
Storage Temperature -40°C to 70°C (-40°F to 158°F)
Humidity 5% to 95% (non-condensing)
Ambient Light $0\sim100,000\text{LUX}$

Certificates

Certificates & Protection FCC Part 15 Class B, CE EMC Class B, RoHS

Accessories

NLS-EVK

Software development board for the NLS-EM50S, 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.

RS-232 Used to connect the NLS-EVK to a host device.

Power Adapter.

DCEV power adapter to power the NLS-EVK with RS-233

Power Adapter DC5V power adapter to power the NLS-EVK with RS-232 cable.

 $\hbox{*Test conditions: T=$23^\circ\mathbb{C}$; Illumination$=$300 lux using incandescent lamp; sample printed barcodes made by Newland and the printed barcodes and the printed barcodes and the printed barcodes are larger than the printed barcodes and the printed barcodes are larger than the printed barcodes are lar$

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

1D: Code 128; 5 Bytes; Resolution=10mil; PCS=0.8.

Specifications are subject to change without notice.

Version: VI.4

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