



NLS-FM80

FIXED MOUNT BARCODE SCANNER

FEATURES

○ Superior Scanning Performance

Armed with Newland's **UIMG®**+AIBD technology, this scanner can scan 1D and 2D barcodes and delivers stunning performance on decoding the wrinkled, reflective and curved barcodes.

○ Powerful OCR Recognition Capability

Equipped with advanced OCR technology, the scanner is ideal for applications requiring accurate data capture from IDs and documents. It instantly scans and extracts text with high accuracy.

○ Advanced Multi-core Processing Platform

Integrated with a multi-core processing platform, the NLS-FM80 offers powerful computing capabilities, ensuring faster and more stable decoding performance.

○ Multiple Status indicators

6 kinds of status indicators show current working status of the scanner, including decoding, configuration, communication and abnormal status.

○ Advanced Sense Mode

The scanner activates a decode session every time it detects a barcode presented to it, and the target barcode shown in the window will not be read repeatedly.

○ High Motion Tolerance

With high motion tolerance, the scanner can quickly capture moving goods, which greatly enhances efficiency.



CMOS



1D Barcode



2D Barcode



OCR



USB



RS232



IP Sealing

NLS-FM80

Performance

Image Sensor		1280 * 1088 CMOS
Illumination		3000K white LED
Symbologies	1D	Code 11, Code 128, Code 39, GSI-128(UCC/EAN128), AIM 128, ISBT 128, CodaBar, Code 93, UPC-A/UPC-E, Coupon, EAN-13, EAN-8, ISSN, ISBN, Interleaved 2/5, Matrix 2/5, Industrial 2/5, ITF-14, ITF-6, Standard 2/5, China post 25, MSI-Plessey, Plessey, GSI Composite, GSI Databar (RSS)
	2D	QR, DataMatrix, PDF417, Aztec
	OCR	Passport OCR, Chinese ID Card, China Travel Permit OCR
	Digimarc	Digital watermark technology
Resolution ¹		≥3mil (1D)
Typical Depth of Field ¹	EAN-13	50mm-80mm (5mil)
	EAN-13	0mm-130mm (13mil)
Min. Symbol Contrast ²		15% (Code 128 10mil)
Scan Angle ²		Roll: 360°, Pitch: ±50°, Skew: ±50°
Field of View		Horizontal 42.4°, Vertical 36°

Physical

Interface		RS-232, USB
Operating Voltage		5 VDC±5%
Current@5VDC ³	Operating	280mA (typical), 800mA (max.)
	Idle	155mA
Dimensions		149 (W) × 78.5 (H) × 166.5 (D) mm (max.)
Weight		455g
Notification		Speaker, LED

Environmental

Operating Temperature	-20°C to 55°C (-4°F to 131°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Humidity	5% to 95% (non-condensing)
ESD	±15 KV (air discharge); ±8 KV (direct discharge)
Sealing	IP52

Certificates

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

Cable	Standard	2m USB data cable, used to connect the scanner to a host device.
Power Adapter	Optional	DC5V power adapter to power the scanner.

¹ Test conditions: T=23°C; Illumination=300lux using incandescent lamp; sample barcodes made by Newland.

² Test conditions: Scan Distance=(min. DOF + max. DOF)/2; T=23°C; Illumination=300lux using incandescent lamp; 2D: QR Code; 10 Bytes; Resolution=30mil; PCS=0.8;

³ Operating Current: Scan Distance=(min. DOF + max. DOF)/2; test in the normal mode

Specifications are subject to change without notice.

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Pin Definition

The following table lists the pin functions of the 10-pin RJ45 connector.

PIN#	Signal	I/O	Function	Remark
1	EF_3V3	O	Good read indicator/for other functions	3.3V level
2	EF_5V	O	Good read indicator/for other functions	5V level
3	VCC5V	I	5V power input	
4	RS232_TX	O	RS232 level TX output	Connect to the host
5	RS232_RX	I	RS232 level RX input	Connect to the host
6	RS232_CTS	I	RS232 level CTS input	Connect to the host
7	RS232_RTS	O	RS232 level RTS output	Connect to the host
8	GND	Ground	Ground	
9	USB_D-	I/O	USB_D-	
10	USB_D+	I/O	USB_D+	

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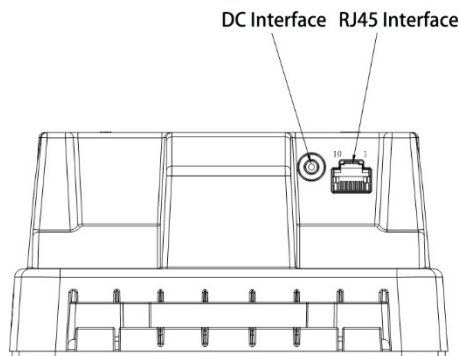
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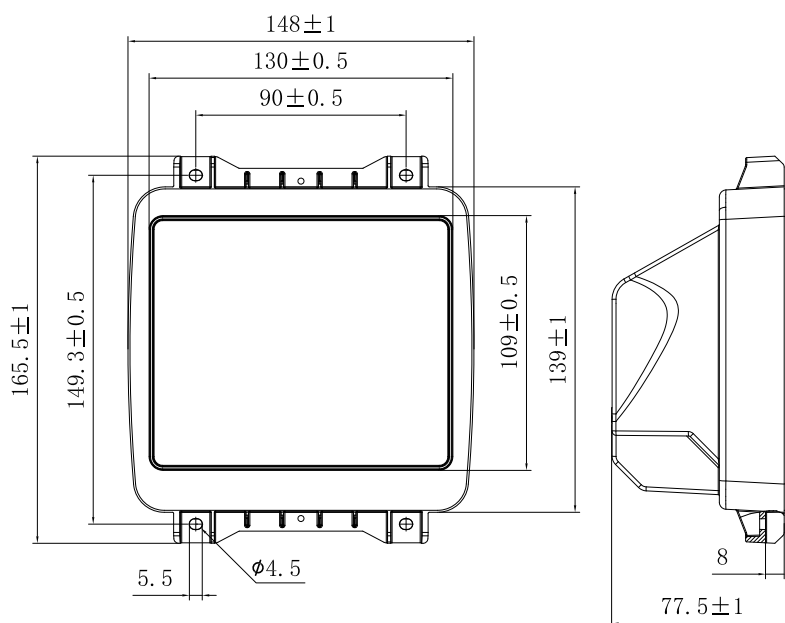
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Interface & Dimension

Interface



Dimension



Max dimensions (mm): 149(W) × 78.5(D) × 166.5(H)

Version: V2.1

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