



**Newland AIDC**  
Scanning Made Simple



## NLS-HR42

### INDUSTRIAL HANDHELD BARCODE SCANNER

## FEATURES

- Excellent DPM Decoding Capability**  
 Armed with Newland's latest-generation industrial decoding algorithm, it has strong decoding ability for DPM barcodes such as radium carving and dotting barcodes.
- New Upgrade Of Optical Depth Of Field**  
 It adopts the depth of field design which is more in line with the user's habits.
- Easy to configure and update**  
 By configuring the software NSet, the scanner's functions can be diversified configuration.
- Snappy On-screen Barcode Capture**  
 Optimized for digital barcode reading, this CPU-based scanner is capable of reading 1D as well as high-volume 2D barcodes on a screen covered with protective film.
- High-Resolution Image Sensor**  
 Using 1280×960 megapixels image sensor, the scanner can decode higher precision barcodes.
- High Protection Industrial Structure Design**  
 The NLS-HR42 adopts a more suitable sound cavity design, high elastic trigger design, which is more ergonomic and has better pull feedback. And it is built into an IP42-sealed, which can withstand repeated falls from 1.8meters to the ground, with excellent reliability and stability.
- Superior Motion Tolerance**  
 Exceptional motion tolerance (2.7m/s) and large FOV (horizontal 68°, vertical 51°) enhance user experience.



1D Barcode



2D Barcode



IP sealing



Drop



RS232



USB



Manufacturing

# NLS-HR42

## Performance

Image Sensor		1280 × 960 CMOS
Illumination		White LED
Aiming		650nm laser diode
Symbologies	2D	QR Code, Micro QR Code, PDF 417, Data Matrix.
	1D	EAN-8, EAN-13, UPC-E, UPC-A, Code 128, UCC/EAN128, Interleaved 2 of 5, ITF-14, ITF-6, Matrix 2 of 5, CodaBar, Code 39, Code 93, ISSN, ISBN, Industrial 25, Standard 25, Plessey, Code11, MSI Plessey, AIM 128, ISBT 128, COOP 25, Deutsche14, Deutsche12.
Resolution*		≥3mil
Product Type		NLS-HR42
Typical Depth of Field*	EAN-13(13mil)	25mm-160mm
	Code 39(5mil)	40mm-100mm
	Code 39(20mil)	35mm-210mm
	Data Matrix(10mil)	0mm-125mm
	QR Code(20mil)	20mm-180mm
Min. Symbol Contrast*		25%
Scan Angle**		Roll: 360°, Pitch: ±50°, Skew: ±50°
Motion Tolerance*		2m/s
Field of View		Horizontal 41°, Vertical 31°

## Physical

Interface		USB, RS232
Operating Voltage		5VDC±5%
Rated Power Consumption		2220.8mW (typical)
Current@5VDC	Power consumption	401.5mA (Max)
	Idle	109mA
Dimensions		74(W) ×115(D) ×161(H) mm (max.)
Weight		173g
Notification		Beep, LED indicator, vibration

## Environmental

Operating Temperature		-20°C to 50°C (-4°F to 122°F)
Storage Temperature		-40°C to 70°C (-40°F to 158°F)
Humidity		5% to 95% (non-condensing)
Ambient Light		0-100,000lux (natural light)
ESD		±16 KV (air discharge); ±8 KV (direct discharge)
Drop		1.8m
Sealing		IP42

## Certificates

Certificates & Protection	CE EMC Class B, FCC Part15 Class B, RoHS IEC62471, EN 60825-1:2014
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\*Test conditions: T=23°C; Illumination=300lux using incandescent lamp; sample printed barcodes made by Newland.

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

Specifications are subject to change without notice.

Version: V1.1

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