



**Newland AIDC**  
Scanning Made Simple



## NLS-NVH220-XD

### HANDHELD INDUSTRIAL BARCODE SCANNER

## FEATURES

### Excellent DPM Decoding Capability

Featuring the latest UIMG<sup>®</sup> decoding system, it enhances decoding success rates for complex barcodes, optimizing workflows and improving overall decoding efficiency. It also delivers exceptional decoding performance for DPM barcodes, including laser-etched and dot-peened markings.

### Upgraded Dual-Core Processing Platform

The NLS-NVH220-XD features an upgraded dual-core processing platform that enhances computing capability and efficiency, enabling faster, more stable decoding with lower power consumption.

### Advanced Illumination System

Provides red and blue direct illumination and white diffuse lights. The versatile lighting system accommodates various materials (such as reflective surfaces), shapes (such as curved surfaces), backgrounds, and barcode colors, meeting diverse and complex scanning requirements.

### AI Function and Intelligent Learning

Equipped with the latest AI-powered barcode positioning technology, the NLS-NVH220-XD improves decoding performance for low-contrast barcodes. Additionally, intelligent learning enables automatic parameter adjustments based on different scenarios.

### High Protection Industrial Structure Design

The NLS-NVH220-XD, built into an IP64-sealed and can withstand repeated falls from 2.4 meters to the ground, chemical-resistant housing, with excellent reliability and stability.



AI



1D Barcode



2D Barcode



IP sealing



RS232



USB



Drop

# NLS-NVH220-XD

## Performance

Image Sensor		1280 × 800 CMOS
Illumination		Direct: red & blue LEDs; Diffuse: white LED;
Aiming		650nm, crosshair laser
Symbologies	2D	QR Code, PDF417, Micro QR, Data Matrix, AZTEC.
	1D	EAN-13, EAN-8, UPC-A, UPC-E, ISSN, ISBN, Codabar, Code128, Code93, ITF-6, ITF-14, Interleaved 2 of 5, Industrial 2 of 5, Standard 2 of 5, Matrix 2 of 5, Code 39, AIM 128, GSI Composite, GSI-128 (UCC/EAN), ISBT 128
Resolution*		≥3mil
Typical Depth of Field*	EAN-13 (13mil)	35mm-200mm
	Code 39 (5mil)	15mm-150mm
	Code 39 (20mil)	75mm-270mm
	Data Matrix (10mil)	10mm-140mm
	QR Code (20mil)	10mm-200mm
Motion Tolerance*		2m/s
Min. Symbol Contrast*		20%
Scan Angle**		Roll: 360°, Pitch: ±50°, Skew: ±50°
Field of View		Horizontal 33°, Vertical 22°

## Physical

Interface		USB, RS232, Ethernet
Operating Voltage		5VDC±5%
Rated Power Consumption		1500mW (typical)
Current@5VDC	Operating (typical)	300mA
	Operating (max.)	450mA
Dimensions		68(W)×86(D)×180(H) mm
Weight		160g (without cable)
Notification		Beep, LED indicator, Vibrator
Communication Protocols		Supports USB CDC, USB HID KBW ,RS232, TCP/IP, Ethernet/IP, Profinet

## 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)
ESD	±16 KV (air discharge); ±8 KV (direct discharge)
Drop	2.4m
Sealing	IP64

## Accessories

Accessories	Cable	USB	USB cable
		RS-232	RS232 cable and AC adapter, Input 100-240V, output DC 5V/1.5A
		Ethernet	Ethernet cable and AC adapter, Input 100-240V, output DC 5V/1.5A

## Certification

Certification	CE, FCC, RoHS 2.0, IEC 60825-1, IEC 62471, BIS, KC, ISO 16750-5:2023
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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; 2D: QR Code; 10 Bytes; Resolution=15mil; PCS=0.8.

Specifications are subject to change without notice.

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