



NLS-NVH220B-HD

HANDHELD INDUSTRIAL BARCODE SCANNER

FEATURES

Excellent DPM Decoding Capability

Powered by Newland's latest-generation **UIMG®** decoding algorithm, the NLS-NVH220B-HD significantly improves decoding performance on complex barcodes and excels at decoding laser-etched and dot-peened DPM codes.

Upgraded Dual-Core Processing Platform

The NLS-NVH220B-HD features an upgraded dual-core processing platform that delivers higher compute performance at lower power, enabling faster, more stable decoding and superior image capture.

Versatile Illumination System

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

Advanced OCR Recognition Technology

Equipped with advanced OCR technology, the NLS-NVH220B accurately recognizes alphanumeric characters on products and materials, boosting productivity.

High Protection Industrial Structure Design

The NLS-NVH220B built into an IP64-sealed and can withstand repeated falls from 1.8 meters to the ground, with excellent reliability and stability.

Wireless Connectivity

Powered by the new generation of wireless communication technology, the scanner delivers low-latency, highly reliable performance with strong interference immunity, ensuring stable, reliable, and accurate data transmission even in complex RF environments.

AI Function and Intelligent Learning

Equipped with the latest AI-powered barcode positioning technology, the NLS-NVH220B improves decoding performance for low-contrast barcodes. Additionally, intelligent learning enables automatic parameter adjustments based on different scenarios.



AI



1D Barcode



2D Barcode



IP sealing



Wireless



USB



Drop

NLS-NVH220B-HD

Performance

Image Sensor	1280 × 800 CMOS
Illumination	Direct: red & blue LEDs; Diffuse: white LEDs;
Aiming	650nm, crosshair laser
Symbologies	ID 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, GS1 Composite, GS1-128(UCC/EAN), ISBT 128, Code 11, MSI-Plessey, Plessey, etc. 2D QR Code, PDF417, Micro QR, Data Matrix, AZTEC. OCR Optional
Resolution	ID ≥1.85mil 2D ≥3mil EAN-13(13mil) 10mm-280mm Code 39(5mil) 30mm-180mm Typical Depth of Field Code 39(20mil) 50mm-440mm Data Matrix(10mil) 15mm-140mm QR Code(20mil) 10mm-250mm
Min. Symbol Contrast	15%
Scan Angle	Roll: 360°, Pitch: ±50°, Skew: ±50°
	Horizontal 42°, Vertical 28°

Physical

Interface	USB, RS232
Rated Power Consumption	1400mW (typical)
Current@3.8VDC	Operating 370mA (red LED by default) Standby 90mA Idle 40mA
Dimensions(L×W×H)	Scanner: 68 × 86 × 180mm Cradle: 103 × 127 × 123 mm
Weight	Scanner: 218g (with battery), cradle:217g
Notification	Beep, LED indicator, Vibrator

Environmental

Operating Temperature	-20°C to 50°C (-4°F to 122°F)
Battery Charging Temperature	0°C to 45°C (32°F to 113°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	1.8m
Sealing	Scanner: IP64 Cradle: IP42

Wireless

Communication Distance	150m (line of sight)
Expected Battery Life	≥17 hours of continuous operation, up to 60,000 scans per charge
Expected Charge Time	3 hours

Newland AIDC

Add: No.1 Rujiang West Rd.,
Mawei, Fuzhou, Fujian 350001, China
Tel: +86-591-83979500
Fax: +86-591-83979216
Email: info@newlandaidc.com
Web: www.newlandaidc.com

Asia Pacific

Add: 6 Raffles Quay #14-06
Singapore 048582
Email: info@newlandaidc.com

Europe & Middle East

Add: Rolweg 25, 4104 AV Culemborg,
The Netherlands
Tel: +31 (0) 345 87 00 33
Email: sales@newland-id.com
Tech Support: tech-support@newland-id.com

North America & Latin America

Add: 46559 Fremont Blvd.,
Fremont, CA 94538, USA
Tel: +1 510 490 3888
Fax: +1 510 490 3887
Email: info@newlandaidc.com

NLS-NVH220B-HD

Certifications

Certifications			CE, CCC, FCC, KC, BIS, RoHS2.0, IEC62471, IEC60825
Accessories	Cable	USB	Used to connect the NVH220B-HD to a host device.
		RS-232	Used to connect the NVH220B-HD to a host device.
Others			Removable battery (2900 mAh), wall-mounted bracket, rubber boot

Specifications are subject to change without notice.

Version: V1.0

Newland AIDC

Add: No.1 Rujiang West Rd.,
Mawei, Fuzhou, Fujian 350001, China
Tel: +86-591-83979500
Fax: +86-591-83979216
Email: info@newlandaidc.com
Web: www.newlandaidc.com

Asia Pacific

Add: 6 Raffles Quay #14-06
Singapore 048582
Email: info@newlandaidc.com

Europe & Middle East

Add: Rolweg 25, 4104 AV Culemborg,
The Netherlands
Tel: +31 (0) 345 87 00 33
Email: sales@newland-id.com
Tech Support: tech-support@newland-id.com

North America & Latin America

Add: 46559 Fremont Blvd.,
Fremont, CA 94538, USA
Tel: +1 510 490 3888
Fax: +1 510 490 3887
Email: info@newlandaidc.com