



NLS-NVH220B-XD

HANDHELD INDUSTRIAL BARCODE SCANNER

FEATURES

Excellent DPM Decoding Capability

Powered by Newland's latest-generation **UIMG®** decoding algorithm, the NLS-NVH220B-XD 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 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-HXD accurately recognizes alphanumeric characters on products and materials, boosting productivity.

High Protection Industrial Structure Design

The NLS-NVH220B-HXD, built into an IP64-sealed and can withstand repeated falls from 2.4 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.

Versatile Communication Interface

The NLS-NVH220B-HXD integrates USB, RS-232, and Ethernet interfaces, supporting mainstream industrial protocols such as TCP/IP, Ethernet/IP, Profinet, and Modbus. With interface auto-adaptation, it enables seamless and rapid connection to debugging software.



AI



1D Barcode



2D Barcode



IP 64



Ethernet



Wireless



USB



Drop

NLS-NVH220B-XD

Performance

Image Sensor	1280 × 800 CMOS
Illumination	Direct: red & blue LEDs; Diffuse: white LED;
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, GSI Composite, GSI-128(UCC/EAN), ISBT 128, Code 11, MSI-Plessey, Plessey, etc. 2D QR Code, PDF417, Micro QR, Data Matrix, AZTEC. OCR Optional
Resolution	ID ≥1.25mil 2D ≥2.82mil 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
Typical Depth of Field	
Min. Symbol Contrast	15%
Scan Angle	Roll: 360°, Pitch: ±50°, Skew: ±50°
	Horizontal 33°, Vertical 22°

Physical

Interface	RS-232, TCP/IP, ModbusTCP, Ethernet/IP, Profinet, MELSEC \SLMP
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	2.4m
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

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NLS-NVH220B-XD

Certifications

Certifications		CE, CCC, FCC, KC, BIS, RoHS2.0, IEC62471, IEC60825, ISO16750
Accessories	Cable	USB cable, RS232 cable, Ethernet cable,
	Adapter	Input 100~240VAC, output 5VDC/3A
	Others	Removable battery (2900 mAh), wall-mounted bracket, rubber boot

Specifications are subject to change without notice.

Version: V1.0

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