Newland AIDC
Scanning Made Simple

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-XD accurately recognizes alphanumeric characters on products and materials, boosting productivity.

High Protection Industrial Structure Design

The NLS-NVH220B-XD, 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-XD 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 sealing | 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	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, 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	1D	≥1.25mil
	2D	≥2.82mil
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
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

Newland AIDC
Scanning Made Simple

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

Newland AIDC
Scanning Made Simple