Newland AIDC
SCANNING MADE SIMPLE



NVH220 Lophius AI Corded

Industrial Handheld Scanners

1.8m drop
1D & 2D
Acuscan
Advanced Scripting
AI-Powered Barcode Detection
DPM
EasySet
Ethernet
GS1 Ready
IP64
Laser Aimer
RS-232
USB
Warranty 5 Years
White Illumination



Features

AI-Powered Scanning Technology.
The NVH220 Lophius AI Corded is equipped with Newland's UIMG and AI-Powered Barcode Detection scanning technologies. These advanced systems enable rapid, accurate, and reliable decoding of both 1D and 2D barcodes, even when they are damaged or distorted, as well as on reflective and curved surfaces. AI-powered devices utilize computer vision and self learning to interpret barcodes accurately. They efficiently analyze images to detect, locate, and read barcodes. The NVH220 Lophius AI Corded excels in challenging conditions, demonstrating advanced decoding performance and providing a reliable scanning solution that functions flawlessly in any situation.

High-Performance DPM Scanning
The NVH220 Lophius AI Corded is distinguished by its outstanding ability to decode DPM barcodes, including those created using laser part marking and dotting techniques. Equipped with an upgraded dual-core processing platform, the NVH220 offers enhanced performance while consuming less power. This results in faster and more stable decoding, as well as improved image capture.

Advanced Illumination.
The NVH220 Lophius AI Corded features both red and blue direct illumination and white diffuse lighting. These lighting options can be easily activated using the auto-learning function button located on the top of the device. With this feature, the NVH220 automatically adjusts brightness and light source to optimize barcode decoding, even on challenging materials. This includes reflective surfaces, curved shapes, varied backgrounds (ranging from low to high contrast), and different barcode colors.

Robust by Design.
The NVH220 Lophius AI Corded is built for durability, featuring a robust design that can endure challenging conditions. Its high-protection construction and IP64-sealed housing ensure reliable performance, even in environments with dust and water exposure, as well as after repeated drops from heights of up to 1.8 meters.

Configure To Your Needs.
The NVH220 Lophius AI Corded can be easily configured to meet the specific needs of any application using the free configuration software, EasySet.

5 Years Full Warranty

EasySet

TECHNICAL SPECIFICATIONS

NVH220 Lophius AI Corded

Data Capture

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 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.
Aiming	Cross laser (650nm)
Depth of Field Code 39 (20mil)	35 mm - 510 mm
Depth of Field Code 39 (5mil)	0 mm - 160 mm
Depth of Field EAN 13 (13mil)	15 mm - 220 mm
Depth of Field QR (10mil)	0 mm - 160 mm
Depth of Field QR (20mil)	0 mm - 225 mm
Field of View Horizontal	33°
Field of View Vertical	22°
GS1 Ready	Yes
Illumination	Direct: red & blue LEDs, Diffuse: white LED
Image Sensor	1280 x 800 CMOS
Minimal Print Contrast	20%
Motion Tolerance	2 m/s
OCR	Optional
Resolution	≥2mil
Scan Angle Pitch	±50°
Scan Angle Roll	360°
Scan Angle Skew	±50°

Physical

Current @ 5VDC Operating	300 mA (typical), 450 mA(max)
Dimensions	68(W) × 86(D) × 180(H) mm
Input Voltage	5 VDC ±5%
Interfaces	USB, RS-232, Ethernet
Notifications	Beep, LED, Vibration
Power Consumption	1,500 mW (typical)
Weight	160g (without cable)

Environmental

Drop	1.8m

Electro Static Discharge (ESD)	±16 kV (air discharge), ±8 kV (direct discharge)
Humidity	5% to 95% (non-condensing)
IP Rating	IP64
Operating Temperature	-20°C to 50°C (-4°F to 122°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Communication	
Communication Protocol	RS-232, TCP-IP, USB
Software	
Configuration Tools	EasySet
Certifications	
Certifications Hardware	CE, FCC, RoHS, IEC 62471
Warranty	
Comprehensive Service Contract	3 Years, 5 Years
Warranty Standard	5 Years
Accessories	
Accessories Optional	Ethernet cable, RS-232 cable, USB cable
Accessories Standard	USB cable, Power adapter
What's in the box?	
NLS-NVH220-V2-XD	NVH220 Lophius AI Corded, 2 meter USB cable, 5V power supply

Accessories

Charging/Power	ADP220 Power Supply for NVH220 Lophius Series (ADP220)
Cables	CBL-0275E Ethernet cable for NVH220 AI series (CBL-0275E) CBL017U RJ to USB-C Cable for HR, FR and FM Series (CBL017U) CBL030UA USB Cable for HR, FM, and FR (CBL030UA) CBL036UA USB Cable for HR, FM, and FR Series (CBL036UA) CBL037R RS232 Cable for HR, FR, and FM Series (CBL037R) CBL042UA USB Cable for HR, FM, and FR Series (CBL042UA) CBL048U USB Cable for Ingenico iCT220 (CBL048U) CBL105U USB White Cable for HR Series (CBL105U) CBL128R Cable for Magellan Connection (CBL128R)
Peripherals	EX232 Remora (NLS-EX232-01)
Base Stations	NLS-STD-WM001 Wall Mount Clip for HR Series (NLS-STD-WM001) NLS-STD220 Smart Foldable Stand for NVH220 series (NLS-STD220)

Newland AIDC EMEA
SCANNING MADE SIMPLE

Newland AIDC EMEA
Feel free to contact us or a partner near you.
info@newland-id.com - newland-id.com

Specifications are subject to change without notice
© Newland AIDC EMEA 2026 - All rights reserved