



1D & 2D



DPM



LED  
aimer



Bluetooth  
5.0



IP64



1.8M  
drop



RS232



USB



Nset



Warranty  
3 Years



**NVH220  
Lophius  
Bluetooth**  
Handheld Scanners

## Features

### High-Performance DPM Scanning

The NVH220 Lophius BT stands out with its exceptional proficiency in decoding DPM barcodes, including those made by laser part marking and dotting techniques. With dual-core parallel processing and improved computing power, the NVH220 significantly enhances image capture, recognition, and scanning speed, ensuring accurate and efficient decoding.

### Highly Durable In Tough Environments

Designed with durability in mind, the NVH220 Lophius BT features a robust design that can withstand the toughest conditions. With its high-protection construction and IP64-sealed housing, this scanner ensures reliable performance, even in the face of dust, water, and repeated falls from heights of up to 1.8 meters.

### Intelligent Learning

With the intelligent learning ability, the NVH220 Lophius BT enables automatic parameter adjustments based on previous scanning scenarios, ensuring optimal performance and adaptability. Leveraging three illumination colors and intelligent angle adjustments, the NVH220 Lophius BT automatically explores the options to find the optimal combination for scanning. Once identified, this scanner memorizes the last setting, ensuring efficiency in future code scans.

### Advanced Illumination and AI Functionality

The NVH220 Lophius BT comes equipped with diverse lighting options, encompassing direct white and red illumination, along with diffuse blue ring lights. These advanced illumination capabilities empower the NVH220 Lophius BT to effortlessly scan even the most demanding barcodes across a diverse spectrum of materials (reflective surface), shapes (curved surfaces), backgrounds (low to high contrast), and barcode colors. With advanced AI capabilities, the NVH220 Lophius BT excels in barcode positioning and reconstruction, further enhancing its ability to tackle challenging barcodes.

### Maximised Mobility

Equipped with Bluetooth 5.0, the NVH220 Lophius BT ensures ultrafast wireless communication with other devices. The strong, reliable connection of up to 50m offers all-day flexibility on the work floor.

### Configure To Your Needs

With free configuration software Nset, the NVH220 Lophius BT can be easily configured to suit the needs of any application. Nset is specifically tailored for DPM and high-density scanners, providing users with enhanced flexibility and control over their devices.

## Suggested industries



Warehousing



Logistics



Manufacturing



Industrial



Transportation



# NVH220 Lophius Bluetooth Technical specifications

## Data Capture

1D	All major 1D symbologies
2D	All major 2D symbologies
Image Sensor	1280 × 960 CMOS
Aiming	LED 532nm
Illumination	Direct: white & red light LED; Diffuse: ring of blue LED
Resolution	≥3mil
Depth of Field EAN 13 (13mil)	25mm-160mm
Depth of Field Code 39 (20mil)	35mm-210mm
Depth of Field DataMatrix (10mil)	0mm-125mm
Depth of Field QR (20mil)	20mm-180mm
Scan Angle/Field of View	Roll: 360°, Pitch: ±50°, Skew: ±50°; Horizontal 41°, Vertical 31°
Motion Tolerance	2m/s
Minimal Print Contrast	20%

## Physical

Battery Type	3500mAh
Current @ 5VDC Operating/Standby/Sleep	562mA/116mA/43mA
Dimensions (mm)	Scanner: 68.0(W) × 105.0(D) × 169.0(H) mm, Cradle: 103(W) × 127(D) × 83(H) mm
Expected Battery Life/Charge Time	≥23 hours of continuous operation, up to 60,000 scans per charge; 2 hours
Input Voltage	5VDC±5%
Interfaces	USB, RS232
Notifications	Buzzer, LED indicator, Vibrator
Power Consumption	2246mW (typical)
Weight	Scanner: 220g, Cradle: 230g

## Wireless

Radio Technology	2.4 to 2.2835 GHz ISM Band, Bluetooth 5.0 BLE
Wireless Distance (max.)	150m (line of sight)

## Environmental

Ambient Light	0~100,000lux (natural light)
Operating Temperature/Storage Temperature	-20°C to 50°C(-4°F to 122°F); -40°C to 70°C(-40°F to 158°F)
Humidity	5% to 95% (non-condensing)
Electro Static Discharge (ESD)	±16 KV (air discharge); ±8 KV (direct discharge)
Drop	1.8m
IP Rating	Scanner: IP64, Cradle: IP42

## Accessories

Standard	NVH220B_CD220 docking station and CBL042UA USB cable
----------	--

### Newland EMEA HQ

+31 (0) 345 87 00 33

[info@newland-id.com](mailto:info@newland-id.com)

[newland-id.com](http://newland-id.com)

Feel free to contact us or a partner near you

visit [newland-id.com/partners](http://newland-id.com/partners)

Specifications are subject to change without notice

© Newland EMEA 2023, all rights reserved



# NVH220 Lophius Bluetooth Technical specifications

Certifications	
Hardware	FCC, CE, ROHS, IEC63471