



WIRELESS 2D RING SCANNER

NLS-BS20

Scanning made simple.

With the click of a button, the BS20 pairs to your preferred device via Bluetooth 5.0 — Windows, Android or iOS, tablet, smartphone, computer or another Newland device. Small but strong, it stays reliable even in semi-rough operational environments and gives freedom of movement up to 50 m from the host.

NEWLAND AIDC, AVAILABLE THROUGH VERITRONICS



FEATURES

Reliable Wireless Communication

Bluetooth 5.0 pairing gives freedom of movement up to 50 m (164 ft) from the host device.

Scan Hands Free

Reads a wide range of 1D and 2D barcodes. Fits comfortably on either hand, with a trigger positioned for one-hand operation.

Exceptional Battery Life

670 mAh battery runs a comfortable 10 hours of continuous operation. USB cable included for convenient charging.

KEY SPECIFICATIONS

Image Sensor	640×480 CMOS	Dimensions (L×W×H)	38×52.5×44.2mm (1.5×2.07×1.74in)
Radio Technology	Bluetooth 5.0 (BLE, HID)	Weight	49g (1.73oz)
Communication Distance	50m / 164ft (open space)	Drop	1.2m / 3.94ft
Battery	670 mAh · 10 hrs continuous	Sealing	IP42
Resolution	≥3 mil (0.076mm / 0.003in)	Operating Temperature	-20°C to 50°C (-4°F to 122°F)

Technical Specifications

NLS-BS20

PERFORMANCE

Image Sensor	640×480 CMOS
Illumination	White LED
Aiming	Red LED (625nm)
Symbologies	1D: Code128, UCC/EAN-128, AIM128, EAN-8, EAN-13, ISBN/ISSN, UPC-E, UPC-A, Interleaved 2 of 5, ITF-6, ITF-14, Standard 25, Codabar, Industrial 25, Code39, Code 93, Code 11, Plessey, MSI-Plessey, GS1-DataBar™ (RSS), Matrix 2 of 5 2D: PDF417, QR Code, Data Matrix, Aztec, Micro PDF, Micro QR
Resolution*	≥3 mil (0.076mm / 0.003in)
Typical Depth of Field*	EAN-13 (13mil): 55–280mm (2.17–11.02in) · QR Code (15mil): 30–195mm (1.18–7.68in) Code 39 (5mil): 55–145mm (2.17–5.71in) · PDF417 (6.67mil): 40–130mm (1.57–5.12in) Data Matrix (10mil): 40–140mm (1.57–5.51in)
Scan Angle**	Pitch: ±60°, Roll: 360°, Skew: ±60°
Field of View	Horizontal 45°, Vertical 34°
Min. Symbol Contrast*	20%

WIRELESS

Communication Mode	Bluetooth BLE, Bluetooth HID Modes
Radio Technology	Bluetooth 5.0
Communication Distance***	50m / 164ft (open space)

PHYSICAL

Battery	670 mAh lithium-ion battery
Expected Charge Time	<2 hours
Expected Battery Life	11,000 scans (1 scan/second, depending on application and environment)
Dimensions (L×W×H)	38×52.5×44.2mm (1.5×2.07×1.74in)
Weight	49g (1.73oz)
Notification	Beep, LED, vibration
Operating Voltage	5VDC±5%

ENVIRONMENTAL

Operating Temperature	-20°C to 50°C (-4°F to 122°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Battery Charge Temperature	0°C to 45°C (32°F to 113°F)
Humidity	5%–95% (non-condensing)
ESD	±12kV (air discharge); ±8kV (direct discharge)
Drop	1.2m / 3.94ft
Sealing	IP42

CERTIFICATES

Certificates & Protection	FCC, CE, RoHS, IEC62471, BIS, WPC
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*Test conditions: T=23°C; Illumination=300lux using incandescent lamp; sample printed barcodes made by Newland.

**Test conditions: Scan Distance=(min. DOF + max. DOF)/2; T=23°C; Illumination=300lux using incandescent lamp; 1D: EAN-13 (13mil).

Specifications are subject to change without notice. Version: V1.0.1 2023-07-20