



**Newland AIDC**  
Scanning Made Simple



# NLS-BS20

## BARCODE SCANNER

### FEATURES

- **Scan Hands Free**  
The BS20 is capable of reading a wide range of 1D and 2D barcodes with outstanding performance. It was designed to fit comfortably on your left or right hand without getting in the way of daily tasks, like carrying boxes. Its trigger button is positioned to be easy to operate with one hand.
- **Exceptional Battery Life**  
With 670mAh battery, it will run a comfortable 10 hours of continuous operation (depending on the application and environmental conditions). The provided USB cable allows convenient charging.
- **Reliable Wireless Communication**  
With the click of a button, the BS20 pairs to your preferred device via Bluetooth 5.0 wireless technology. Whether your system runs on Windows, Android or iOS and whether you use a tablet, a smartphone, a computer or another Newland device, connecting the ring scanner is always easy. It provides freedom of movement up to 50 meters from the host.
- **Small but strong**  
The BS20 is reliable, even in semi-rough operational environments.



CMOS



1D Barcode



2D Barcode



IP sealing



Bluetooth

## Performance

Image Sensor		640×480 CMOS
Illumination		White LED
Aiming		Red LED (625nm)
Symbologies	1D	Code128, UCC/EAN-128, AIMI28, 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, GSI-DataBarTM(RSS), Matrix 2 of 5
	2D	PDF417, QR Code, Data Matrix, Aztec, Micro PDF, Micro QR
Resolution*		≥3mil
Typical Depth of Field*	EAN-13	55mm-280mm (13mil)
	QR Code	30mm-195mm (15mil)
	Code 39	55mm-145mm (5mil)
	PDF 417	40mm-130mm (6.67mil)
	Data Matrix	40mm-140mm (10mil)
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 (open space)
Battery	670 mAh lithium-ion battery
Expected Charge Time	<2 hours
Expected Battery Life	10 hours (depending on the application and environmental conditions).

## Physical

Dimensions (L×W×H)	38×52.5×44.2mm
Weight	49g
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	±12 KV (air discharge); ±8 KV (direct discharge)
Drop	1.2m
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;

ID: EAN-13 (13mil).

Specifications are subject to change without notice.

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