



WIRELESS 2D WEARABLE SCANNER

NLS-BS50

Scanning made simple.

Extremely small and lightweight, the BS50 relieves hand fatigue over long shifts, while an IP65-sealed, 1.5 m drop-resistant housing with no moving parts stands up to tough outdoor environments. Newland's latest engine captures high-density, high-volume and distorted barcodes over stable Bluetooth 5.0.



NEWLAND AIDC, AVAILABLE THROUGH VERITRONICS

FEATURES

Compact & Lightweight

Extremely small and light, the BS50 relieves fatigue during long periods of handheld use.

High-Protection Structure

An IP65-sealed, 1.5 m drop-resistant housing with no moving parts is built for tough outdoor environments.

Outstanding Performance

Newland's latest technology captures high-density, high-volume and distorted barcodes on paper or screen.

KEY SPECIFICATIONS

Image Sensor	1280×800 CMOS	Dimensions (L×W×H)	58.8×48.8×18mm (2.31×1.92×0.71in)
Aiming	650nm Laser	Weight	43g (1.52oz)
Radio Technology	Bluetooth 5.0	Drop	1.5m (4.92ft)
Communication Distance	80m / 262ft (open space)	Sealing	IP65
Battery	670 mAh · 11,000 scans	Operating Temperature	-20°C to 50°C (-4°F to 122°F)

Technical Specifications

NLS-BS50

PERFORMANCE

Image Sensor	1280×800 CMOS
Illumination	White LED
Aiming	650nm Laser
Symbologies	2D: PDF417, QR Code, Micro QR, Data Matrix, Aztec, MaxiCode, Chinese Sensible Code, GM Code, Micro PDF417, CODE ONE 1D: EAN-8, EAN-13, UPC-E, UPC-A, Code128, UCC/EAN128, I2of5, ITF14, ITF6, Matrix 25, Codabar, Code39, Code32 (Italian Pharmacode), Code93, ISSN, ISBN, Industrial 25, Standard 25, Plessey, Code11, MSI Plessey, UCC/EAN Composite, GS1 Databar, China Post 25, Code 49, Code 16K OCR: OCR-B, Passport OCR, Chinese ID Card, China Travel Permit · Postal: US PostNet, US Planet, UK Postal, Australia Postal, Japan Postal
Resolution*	≥3 mil (0.076mm / 0.003in)
Typical Depth of Field* (BS50-SR)	EAN-13 (13mil): 65–540mm (2.56–21.26in) · Code 39 (5mil): 120–330mm (4.72–12.99in) · PDF417 (6.7mil): 125–240mm (4.92–9.45in) · Data Matrix (10mil): 125–240mm (4.92–9.45in) · QR Code (15mil): 40–360mm (1.57–14.17in)
Scan Angle**	Tilt: 360°; Pitch: ±65°; Skew: ±75°
Field of View	Horizontal 40°, Vertical 25°
Min Symbol Contrast*	25%

WIRELESS

Communication Mode	Bluetooth BLE, Bluetooth HID Modes
Radio Technology	Bluetooth 5.0
Communication Distance	80m / 262ft (open space)

PHYSICAL

Battery	670 mAh lithium-ion battery
Expected Charge Time	<2 hours (with power adapter)
Expected Battery Life	11,000 scans (once per second)
Dimensions (L×W×H)	58.8×48.8×18mm (2.31×1.92×0.71in)
Weight	43g (1.52oz, scanner)
Notification	Beep, LED and 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	±8kV (contact discharge); ±15kV (air discharge)
Drop	1.5m / 4.92ft
Sealing	IP65

*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.