



# NLS-BS50

## WIRELESS 2D WEARABLE SCANNER

### FEATURES

- Outstanding Performance**  
Equipped with Newland latest technology, the scanner can effortlessly capture high-density, high-volume and distorted barcodes printed on paper or displayed on screen.
- Reliable and Stable Wireless Communication**  
Adopting the Bluetooth 5.0 which is strong anti-interference and stable to transmit the data.
- Compact and Light-weight Design**  
The BS50 is extremely small and lightweight and easy to relieve the fatigue when holding it by hand for a long time.
- High Protection Industrial Structure Design**  
The BS50, built into an IP65-sealed and drop resistant (1.5m) housing with no moving parts fortifies itself inside and out, is suitable for the tough outdoor environments.



CMOS



1D Barcode



2D Barcode



Laser Aimer



IP sealing



Drop



Bluetooth

# NLS-BS50

## Performance

Image Sensor		1280×800 (megapixel) CMOS
Illumination		White LED
Aiming		650nm Laser
Symbolologies	2D	PDF417, QR Code, Micro QR, DataMatrix, Aztec, MaxiCode, Chinese Sensible Code, GM Code, Micro PDF417, CODEONE
	1D	EAN-8, EAN-13, UPC-E, UPC-A, Code128, UCC/EAN128, I2Of5, ITF14, ITF6, Matrix 25, CodaBar, Code39, Code32 (Italian Pharma Code), Code93, ISSN, ISBN, Industrial25, Standard25, Plessey, Codell, MSI Plessey, UCC/EAN Composite, GSI Databar, China Post 25, Code 49, Code 16K
	OCR	Specific OCR-B, Passport OCR, Chinese ID Card, China Travel Permit OCR
Resolution*	Postal	US PostNet, US Planet, UK Postal, Australia Postal, Japan Postal
Typical Depth of Field*		≥3mil EAN-13 (13mil): 65mm-540mm Code 39 (5mil): 120mm-330mm PDF 417 (6.7mil): 125mm-240mm Data Matrix (10mil): 125mm-240mm QR Code (15mil): 40mm-360mm
Scan Angle**		Tilt: 360°; Pitch: ±65°; Skew: ±75°
Field of View		Horizontal 40°, Vertical 25°
Min. Symbol Contrast*		25%

## Physical

Dimension (LxWxH)	58.8×48.8×18mm
Weight	Scanner: 43g
Notification	Beep, LED and vibration
Operating Voltage	5VDC±5%

## Wireless

Communication Mode	Bluetooth BLE, Bluetooth HID Modes
Radio Technology	Bluetooth 5.0
Communication Distance***	80m (open space)
Battery	670 mAh lithium-ion battery
Expected Charge Time	<2 hours (with power adapter)
Expected Battery Life	10 hours of continuous operation (depending on the application and environmental conditions)

## 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% to 95% (non-condensing)
ESD	±8 KV (contact discharge); ±15 KV (air discharge)
Drop	1.5m/4.92ft
Sealing	IP65

## Accessories

Accessories	USB cable, gloves (Size M/L, left/right), two-slot charging cradle, Type-c cable, power adapter
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## Certificates

Certificates & Protection	CE RED, FCC ID, RoHS, SRRC, IEC 62471
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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).

\*\*\*Communication Distance:

1, There needs to be a large open space longer than four meters without visible obstacles (buildings, cars, furniture, human bodies and walls, etc.) and serious interference from 2.4G band equipment between the host and the scanner.

2, The host and the scanner must be separated from the large-area conductor (earth, metal plate, etc.) by more than 50cm in all directions.

3, The communication distance is valid when the host receives the correct barcode 10 times after manually scanning test barcodes (EAN13 13mil) in real-time mode.

Specifications are subject to change without notice.

Version: V1.0

