



## HANDHELD 2D BARCODE SCANNER

# NLS-HR3000

## Scanning made simple.

Newland's latest self-developed decoding engine and a 1280×800 megapixel sensor let the HR3000 read high-density, damaged and on-screen barcodes with speed and precision. Built-in Digimarc® and GS1 Digital Link support ready it for next-generation point of sale.

NEWLAND AIDC, AVAILABLE THROUGH VERITRONICS



## FEATURES

### High-Performance Decoding

Newland's latest decoding technology delivers powerful, high-speed and highly accurate reading — even in challenging scanning scenarios.

### Digimarc® & GS1 2D Ready

Enabled for Digimarc® digital watermark and GS1 Digital Link, with built-in Modes 1, 2 and 3 for a frictionless, future-proof checkout.

### Range & AI-Powered OCR

Excellent depth of field plus AI-driven OCR for passports, dates and alphanumeric text across logistics, warehousing and retail.

## KEY SPECIFICATIONS

|                     |                              |                       |                                     |
|---------------------|------------------------------|-----------------------|-------------------------------------|
| Image Sensor        | 1280×800 CMOS                | Dimensions (L×W×H)    | 115.7×67.5×147mm (4.56×2.66×5.79in) |
| Aiming              | Laser                        | Weight                | 140g (4.94oz)                       |
| Interface           | USB, RS-232                  | Drop                  | 1.5m (4.92ft)                       |
| Field of View       | Horizontal 48°, Vertical 30° | Sealing               | IP52                                |
| Min Symbol Contrast | 15%                          | Operating Temperature | -20°C to 60°C (-4°F to 140°F)       |

# Technical Specifications

NLS-HR3000

## PERFORMANCE

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor            | 1280×800 CMOS                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Illumination            | White LED                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Aiming                  | Laser                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Symbologies             | 1D: Code 11, Code 128, Code 39, GS1-128 (UCC/EAN-128), AIM 128, ISBT 128, Codabar, Code 93, UPC-A, UPC-E, Coupon, GS1 Composite, EAN-13, EAN-8, ISSN, ISBN, Interleaved 2 of 5, Matrix 2 of 5, Industrial 2 of 5, ITF-6, ITF-14, Standard 2 of 5, China Post 25, MSI-Plessey, Plessey, GS1 Databar (RSS), Code 49, Code 16K, Deutsche 14, Deutsche 12<br>2D: PDF417, QR Code, Micro QR, Data Matrix, Aztec, Maxi Code, Chinese Sensible Code, GM Code, Micro PDF417, Code One, DotCode |
| OCR                     | Passport, European Driver License, Chinese ID Card, China Travel Permit (default); optional: date & general alphanumeric                                                                                                                                                                                                                                                                                                                                                               |
| Postal                  | USPS Postnet, USPS Intelligent Mail, Royal Mail, USPS Planet, KIX Post, Australian Postal, Japan Post                                                                                                                                                                                                                                                                                                                                                                                  |
| Digimarc®               | Digital watermark technology                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Resolution*             | ≥3 mil (0.076mm / 0.003in)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Typical Depth of Field* | EAN-13 (13mil): 35–510mm (1.38–20.08in) · Code 39 (5mil): 30–270mm (1.18–10.63in) · PDF417 (6.7mil): 35–180mm (1.38–7.09in) · Data Matrix (10mil): 20–190mm (0.79–7.48in) · QR Code (15mil): 15–300mm (0.59–11.81in)                                                                                                                                                                                                                                                                   |
| Scan Angle**            | Pitch: ±60°, Skew: ±60°, Roll: 360°                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Field of View           | Horizontal 48°, Vertical 30°                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Min Symbol Contrast*    | 15%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## PHYSICAL & ELECTRICAL

|                    |                                                  |
|--------------------|--------------------------------------------------|
| Interface          | USB, RS-232                                      |
| Operating Voltage  | 5VDC±5%                                          |
| Rated Power        | 1175mW (typical)                                 |
| Current @5VDC      | Operating 235mA (typ.), 260mA (max.); Idle 100mA |
| Dimensions (L×W×H) | 115.7×67.5×147mm (4.56×2.66×5.79in)              |
| Weight             | 140g (4.94oz)                                    |
| Notification       | Beep, LED, vibration                             |

## ENVIRONMENTAL

|                       |                                                 |
|-----------------------|-------------------------------------------------|
| Operating Temperature | -20°C to 60°C (-4°F to 140°F)                   |
| Storage Temperature   | -40°C to 70°C (-40°F to 158°F)                  |
| Humidity              | 5%–95% (non-condensing)                         |
| ESD                   | ±15kV (air discharge); ±8kV (contact discharge) |
| Ambient Light         | 0–100,000 lux                                   |
| Drop                  | 1.5m (4.92ft)                                   |
| Sealing               | IP52                                            |

## CERTIFICATES

|                           |                                                |
|---------------------------|------------------------------------------------|
| Certificates & Protection | CE, FCC, KC, BIS, RoHS 2.0, IEC62471, IEC60825 |
|---------------------------|------------------------------------------------|

\*Test conditions: T=23°C; Illumination=300lux using incandescent lamp; sample 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: V2.1