



**N1-W**  
OEM Scan Engines

## Features

### Compact Power.

The N1-W is designed to be compact and lightweight, with dimensions of 23.8 x 7.5 x 7 mm and a weight of 1.2g. Despite its small size and weight, it delivers high performance due to its embedded chip for decoding rather than a separate processor. The N1-W provides excellent value and can be easily integrated into small instruments, even handheld devices, without sacrificing fast scanning and aiming technology.

### Precision from Every Angle.

The N1-W scanner is optimized for near-field scanning thanks to its 68° horizontal and 51° vertical field of view, with a depth of field starting at 20mm. This, coupled with its compact size, makes it especially suited for applications with restricted scan engine-to-code spacing. Additionally, the engine offers flexible code orientation, with 360° roll, 50° pitch, and 50° skew, essential attributes to ensure easy and efficient barcode capture, giving outstanding performance in space-restricted applications.

### 6<sup>th</sup> Generation UIMG Technology.

Like the other engines in the N1 family, the N1-W is equipped with Newland's 6th-generation UIMG scanning technology. This technology enables the N1-W to effortlessly scan all common 1D and 2D barcodes, even those with poor quality, such as low contrast, laminated, damaged, torn, warped, or wrinkled.

### Outstanding Power Efficiency.

Like the other engines in the N1 range, the N1-W can aim, illuminate, and decode barcodes while drawing as little current from the host device as possible. This not only helps to prolong the engine's service life but also offers an eco-conscious solution.

### EasySet Configuration.

The N1-W is compatible with our configuration software EasySet, designed for Windows OS. This software makes testing, deploying configurations, and updating firmware easier.

## Suggested industries



Manufacturing



Healthcare



Industrial



7 mm

23.8 mm

7.5 mm

# N1-W Technical specifications

## Data Capture

1D	Code 128, EAN-8, EAN-13, UPC-E, UPC-A, Interleaved 2/5, ITF-14, ITF-6, Matrix 2/5, Code 39, Codabar, Code 93, UCC/EAN-128, GSI Databar, Codell, ISBN, ISSN, Industrial 2/5, Standard 2/5, Plessey, MSI-Plessey, AIM 128
2D	PDF417, QR Code, Micro QR, Data Matrix, Aztec
Image Sensor	640x480 CMOS
Aiming	625nm Red LED
Illumination	3000K White LED
Resolution	≥3mil (1D), ≥ 6.67mil (2D)
Depth of Field Code 39 (5mil)	25mm-50mm
Depth of Field PDF417 (6.7mil)	25mm-45mm
Depth of Field DataMatrix (10mil)	25mm-45mm
Depth of Field QR (15mil)	20mm-60mm
Field of View	Horizontal 68°, Vertical 51°
Scan Angle/Field of View	±50°
Scan Angle Roll	360°
Scan Angle Pitch	±50°
Minimal Print Contrast	25%

## Physical

Current @ 3.3VDC Operating	68mA (typical)
Current @ 3.3VDC Standby	< 0.3mA
Dimensions (mm)	23.8(W)x7.5(D)x7(H) mm
Interfaces	TTL-232, USB
Weight	1.2g

## Environmental

Ambient Light	0-100,000lux (natural light)
Operating Temperature	-20°C to 55°C (-4°F to 131°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Humidity	5% to 95% (non-condensing)

## Accessories

Standard	Software development board, equipped with a trigger button, beeper and RS-232 & USB interfaces.
Optional	USB cable used to connect the NLS-EVK to a host device. RS-232 cable used to connect the NLS-EVK to a host device. DC5V power adapter used to power the NLS-EVK with RS-232 cable.

## Certifications

Hardware	FCC Part 15 Class B, CE EMC Class B, RoHS 2.0, IEC62471
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## Warranty

Standard	2 Years
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