Newland AIDC
SCANNING MADE SIMPLE



N1-W

Scan Engines

1D & 2D | CMOS | Dual Interface | EasySet | LED Aimer | Standard Level

TTL-232 | USB | White Illumination





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.

6th 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.

2 Years Full Warranty

EasySet

TECHNICAL SPECIFICATIONS

N1-W

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
Aiming	Red LED (625nm)
Depth of Field Code 39 (5mil)	25 mm - 50 mm
Depth of Field DataMatrix (10mil)	25 mm - 45 mm
Depth of Field PDF417 (6.7mil)	25 mm - 45 mm
Depth of Field QR (15mil)	20 mm - 60 mm
Field of View Horizontal	68˚
Field of View Vertical	51˚
Illumination	White LED (3000K)
Image Sensor	640 x 480 CMOS
Minimal Print Contrast	25%
Resolution	≥3mil (1D), ≥6.67mil (2D)
Scan Angle Pitch	±50°
Scan Angle Roll	360°
Scan Angle Skew	±50°

Physical

Current @ 3.3VDC Operating	68 mA (typical)
Current @ 3.3VDC Standby	< 0.3 mA
Dimensions	23.8(W) x 7.5(D) x 7(H) mm
Input Voltage	3.3 VDC ±5%
Interfaces	TTL-232, USB
Weight	1.2 g

Environmental

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

Software

Configuration Tools	EasySet

Certifications

Certifications Hardware	FCC Part15 Class B, IEC 62471, CE EMC Class B, RoHS 2.0

Warranty

Warranty Standard	2 Years

Accessories

Accessories Optional	USB cable, RS-232 cable
Accessories Standard	Software development board

Accessories

Cables	CBLN1-75-13 Flexible Printed Circuit Cable for N1 (CBLN1-75-13)

Newland AIDC EMEA
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