



DESKTOP BARCODE SCANNER

NLS-FR4080

Scanning made simple.

An AI-powered dual-core platform makes the FR4080 fast, stable and efficient, reading paper and on-screen barcodes seamlessly without switching. An IR trigger captures presented barcodes instantly, while a 1.2 m drop rating and IP52 seal keep it working at the counter.

NEWLAND AIDC, AVAILABLE THROUGH VERITRONICS



FEATURES

AI-Powered Decoding

An upgraded dual-core platform boosts computing power and efficiency for faster, more stable decoding at lower power.

IR Trigger Throughput

An IR sensor captures barcodes the moment they are presented, markedly increasing throughput and productivity.

Rugged & Sealed

Withstands multiple 1.2 m drops to concrete and carries an IP52 seal against dust, water and other contaminants.

KEY SPECIFICATIONS

Image Sensor	1280×800 CMOS	Dimensions (W×D×H)	83×81×148mm (3.27×3.19×5.83in)
Illumination	White LED	Weight	290g (10.23oz)
Interface	RS-232, USB	Drop	1.2m / 3.94ft to concrete
Field of View	Horizontal 51°, Vertical 32°	Sealing	IP52
Min Symbol Contrast	25%	Operating Temperature	-20°C to 60°C (-4°F to 140°F)

Technical Specifications

NLS-FR4080

PERFORMANCE

Image Sensor	1280×800 CMOS
Illumination	White LED
Symbologies	2D: PDF417, Data Matrix, QR Code, Micro QR Code, Aztec, etc. 1D: EAN-13, EAN-8, UPC-A, UPC-E, ISSN, ISBN, Codabar, Code 128, Code 93, ITF-6, ITF-14, Interleaved 2 of 5, Industrial 25, Standard 25, Matrix 2 of 5, GS1 Databar, Code 39, Code 11, MSI-Plessey, Plessey, etc.
Resolution*	≥3 mil (0.076mm / 0.003in)
Typical Depth of Field*	EAN-13 (13mil): 10–280mm (0.39–11.02in) · QR Code (15mil): 10–190mm (0.39–7.48in)
Scan Angle**	Pitch: ±50°, Roll: 360°, Skew: ±50°
Field of View	Horizontal 51°, Vertical 32°
Min Symbol Contrast*	25%

PHYSICAL & ELECTRICAL

Interface	RS-232, USB
Operating Voltage	5VDC±5%
Rated Power	1375mW (typical)
Current @5VDC	Operating 275mA (typical)
Dimensions (W×D×H)	83×81×148mm (3.27×3.19×5.83in)
Weight	290g (10.23oz)
Notification	Beep, LED

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	±14kV (air discharge); ±8kV (direct discharge)
Drop	1.2m / 3.94ft to concrete (six sides, one drop per side)
Sealing	IP52

CERTIFICATES

Certificates & Protection	FCC Part15 Class B, CE EMC Class B, RoHS
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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; 1D: EAN-13 (13mil).

Specifications are subject to change without notice. Version: 2.0