Newland AIDC
SCANNING MADE SIMPLE

FR80 Salmon AI

Presentation Scanners



1D & 2D | Advanced Scripting | AI-Powered Barcode Detection | CMOS | EasySet | GS1 Ready

High Motion Tolerance | IP52 | OCR | RS-232 | USB | Warranty 5 Years

Wide Scan Angle



Features

AI-Powered Barcode Detection
The FR80 Salmon AI features Newland's UIMG and AI-Powered Barcode Detection technologies. These advanced systems enable rapid, accurate, and reliable decoding of both 1D and 2D barcodes, even when damaged, distorted, reflective, or on curved surfaces. The Salmon uses computer vision and self-learning capabilities to accurately interpret barcodes. It efficiently analyzes images to detect, locate, and read barcodes. The FR80 Salmon AI performs exceptionally well in challenging conditions, providing a dependable scanning solution that operates flawlessly in any situation.

Advanced OCR Technology
The FR80 Salmon AI is equipped with advanced OCR technology, allowing it to scan and accurately extract text from IDs and official documents. This feature makes the Salmon an ideal scanner for applications that require precise data capture, such as border control, age verification in retail, postal sorting facilities, and library check-in and checkout processes.

Status Indicators
The FR80 Salmon AI is equipped with six different status indicators that indicate the scanner's current operating status. These indicators provide information on decoding, configuration, communication, and any abnormal conditions. This feature is particularly valuable in fast-paced settings, such as point-of-sale applications, as it enables users to quickly confirm whether a barcode has been scanned correctly, helping avoid unnecessary delays at checkout.

EAS deactivation.
The FR80 Salmon AI features a built-in single antenna system for deactivating EAS security tags. It is compatible with major single-loop EAS systems, including Checkpoint, and is conveniently placed near the scan window for easy access.

Advanced Multi-Core Processing Platform.
Equipped with a multi-core processing platform, the FR80 Salmon AI delivers powerful computing capabilities, ensuring faster and more stable decoding performance.

Large Scan Window
The FR80 Salmon AI boasts a large scan window, which allows it to capture barcodes even when products are presented very close to the scanner. This large window is particularly beneficial in fast-paced retail environments, as it enables users of all experience levels to scan codes successfully without needing precise alignment of the barcode with the scanner.

Setting the tone.
The FR80 Salmon allows users to select different audible feedback tones and volumes using two easily accessible buttons. These buttons can be disabled as part of a custom configuration via the user manual or EasySet configuration software.

5 Years Full Warranty

EasySet

TECHNICAL SPECIFICATIONS

FR80 Salmon AI

Data Capture

1D	All major 1D symbologies, including EAN-13, EAN-8, UPC-A, UPC-E, Code 128, Code39, Codabar, UCC/EAN 128, RSS, Interleaved 25, ITF 14, ITF 6, Standard 25, Matrix 25,COOP 25, Industrial 25, Plessey, MSI Plessey, Code 11, Code 93, Code 49, Code 16K.
2D	All major 2D symbologies, including PDF417, QR Code, Data Matrix, Micro PDF417,Micro QR.
Depth of Field EAN 13 (13mil)	0 mm - 140 mm
Field of View Horizontal	42.4°
Field of View Vertical	36°
GS1 Ready	Yes
Illumination	Red LED (614nm-624nm)
Image Sensor	1280 x 1088 CMOS
Minimal Print Contrast	15%
Motion Tolerance	3.5 m/s
Resolution	≥3mil (1D)
Scan Angle Pitch	±50°
Scan Angle Roll	360°
Scan Angle Skew	±50°
Scan Modes	Advanced Sense Mode

Physical

Current @ 5VDC Operating	280 mA (typical), 500 mA (max.)
Current @ 5VDC Standby	155 mA
Dimensions	Without base: 151 (W) x141.5 (H) x97.5 (D) mm (max.); With base: 151 (W) x156.5 (H) x108.5 (D) mm (max.)
Input Voltage	5 VDC ±5%
Interfaces	USB, RS-232
Notifications	Beep, LED
Power Consumption	2W (typical), 2.5W (max.)
Weight	549 g (without base), 681 g (with base)

Environmental

Electro Static Discharge (ESD)	±8 kV (direct discharge), ±15 kV (air discharge)
Humidity	5% to 95% (non-condensing)
IP Rating	IP52
Operating Temperature	-20°C to 50°C (-4°F to 122°F)

Storage Temperature	-40°C to 70°C (-40°F to 158°F)

Software

Configuration Tools	EasySet

Certifications

Certifications Hardware	FCC Part15 Class B, CE EMC Class B

Warranty

Warranty Standard	5 Years

Accessories

Accessories Optional	USB cable, RS-232 cable
Accessories Standard	Power adapter, USB cable, Mounting plate

What's in the box?

NLS-FR8080V2-E-U30	FR80 Salmon AI, 3 meter USB cable, EAS antenna, Multiplug adapter

Accessories

Charging/Power	ADP100 Power Supply for HR, FR, and FM Series (ADP100)
Cables	CBL0155R Coiled Cable for FR80 Series (CBL0155R) CBL0157R RS232 Cable for FR80 and FM80 Series (CBL0157R) CBL017U RJ to USB-C Cable for HR, FR and FM Series (CBL017U) CBL042UA V5.0 USB Cable for FM, and FR Series (CBL042UA V5.0) CBL127R Cable for FR80 (CBL127R) CBL151U USB Cable for FM80 and FR80 (CBL151U)
Peripherals	EX232 Remora (NLS-EX232-01)

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Feel free to contact us or a partner near you.
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