



# FM80 Salmon

Fixed-Mount Scanners



1D & 2D



Advanced  
Scripting



Dual  
Interface



EasySet



Fast  
Motions



GS1  
Ready



IP52



Megapixel



Warranty  
5 Years



Wide  
Scan  
Angle



## Features

### High Motion Tolerance.

The FM80 Salmon can capture EAN codes moving at 3.5 meters per second. This is especially significant for the experienced user at a static point of sale (POS), for quickly processing baskets of goods and reducing check-out queuing.

### Large Scan Window.

Its large scan window and small depth-of-field helps capture barcodes even when the goods are bigger, or the product is being presented very close to the scan window. An additional benefit from a large window in fast-paced retail scanning, is that the user, regardless of experience, doesn't need to be precise when lining up a code for a successful read.

### Comfortable Experience.

The FM80 Salmon's short & long-range illumination and anti-glare are designed for customer-facing applications, such as retail self-service and POS scanning. They prevent the user from being dazzled by sharp illumination and reflections, ensuring a comfortable user experience. Additionally, the FM80 Salmon has a good performance scanning from customer phone-screens.

### Mounting and integration.

As a fixed and mountable scanner that is designed to become part of an installation that often requires the scanner to be flush, the FM80 Salmon has 6 anchor points on the front edge of its window. The IP52 rating requires additional protection from the elements for an exposed application. With this in mind, we have added a soft inlay around the edge of the window for a more comfortable fit into some enclosures.

### Superior Scanning Performance.

As another example of Newland's megapixel scanning technology, the FM80 Salmon delivers stunning performance on decoding even poor-quality and damaged barcodes. Additional benefits for megapixel scanning enable reliable decoding on the higher density 2D barcodes featured on alcohol, tobacco and pharmaceutical products.

### Double reading prevention.

The FM80 Salmon uses active sensors that know the difference between a code that's being presented to be read from one that is not. It knows the difference between a deliberate swipe of a code compared to a code being static for longer than the natural decode time out session. This helps prevent accidental misreads of the same barcode twice.

**5** Years Full  
Warranty

 **EasySet**

TECHNICAL SPECIFICATIONS

# FM80 Salmon

Data Capture

|                               |                                                                                                                                                                                                                                                          |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1D                            | All major 1D symbologies, including EAN-13, EAN-8, UPC-A, UPC-E, Code 128, Code 39, 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                                                                                                                                                                                                                                                  |
| Scan Angle Pitch              | ±55°                                                                                                                                                                                                                                                     |
| Scan Angle Roll               | 360°                                                                                                                                                                                                                                                     |
| Scan Angle Skew               | ±50°                                                                                                                                                                                                                                                     |
| Scan Modes                    | Advanced Sense Mode                                                                                                                                                                                                                                      |

Physical

|                          |                                                      |
|--------------------------|------------------------------------------------------|
| Current @ 5VDC Operating | 500 mA (typical)                                     |
| Current @ 5VDC Standby   | <100 mA                                              |
| Dimensions               | 149(W) × 78.5(D) × 166.5(H) mm                       |
| Input Voltage            | 5 VDC ±5%                                            |
| Interfaces               | RS-232, USB                                          |
| Notifications            | Beep, LED                                            |
| Power Consumption        | Operating: 2W (typical), 2.5W (max.); standby: 1.25W |
| Weight                   | 448.3 g                                              |

Environmental

|                                |                                                  |
|--------------------------------|--------------------------------------------------|
| Electro Static Discharge (ESD) | ±15 kV (air discharge), ±8 kV (direct 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 | Multiplug adapter, USB cable, RS-232 cable, USB-C cable |
| Accessories Standard | USB cable                                               |

What's in the box?

|               |                                |
|---------------|--------------------------------|
| NLS-FM8080-20 | FM80 Salmon, 3 meter USB cable |
|---------------|--------------------------------|

Accessories

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