



EM20-85

Scan Engines



1D



2D



CMOS



CPU



Dual
Interface



EasySet



NFC



Standard

TTL-232

TTL-232



Warranty
2 Years



Features

Customer Facing Scanning

EM20-85 is a close-range scanner with soft, glare-free illumination which can be pointed in a user's direction without any glare, thus ensuring unique usability for scanning processes in self-service.

Snappy On Screen and Printed Barcode Capture

EM20-85 is ready for any smartphone or tablet presented to it. The wide scan angle and optimization for near-distance scanning match the intuitive way end-users present their device to a scanner. This keeps lines moving and operations running smoothly. Besides, EM20-85 achieves optimal performance in reading commodity barcodes from various materials like paper, plastic and metal.

Optional NFC Functionality

A unique feature of the EM20-85 is the integrated NFC reader module. This allows customers to read either barcodes or NFC tags. It supports access cards, user cards and membership cards which opens a range of new and exciting possibilities in customer self-service.

Ultra-Compact Size

At less than 2 cm, the slim footprint makes this scan engine easier to fit into super-thin devices.

6th Generation UIMG Technology

The EM20-85 is armed with Newland's latest-generation scanning technology. Sporting a new decoding algorithm on its CPU processor, the engine delivers excellence no matter what code it's facing. Additionally, it allows the firmware to be adapted to your specific environment and application.

EasySet Configuration.

The EM20-85 is compatible with our master configuration software EasySet. Built for Windows OS, this software is a valuable tool to integrators for building and testing configurations, cloning and deploying configurations, and updating scanner firmware.

2 Years Full
Warranty



EM20-85

Data Capture

1D	Code 128, UCC/EAN128, AIM128, EAN-8, EAN-13, ISSN/ISBN, UPC-E, UPC-A, Interleaved 2 of 5, ITF-6, ITF-4, Standard 25, CodaBar, Industrial 25, Code 39, Code 93, Code 11, Plessey, MSI-Plessey, GS1-128 (UCC/EAN-128), GS1-Databar™ (RSS) (RSS14, RSS-Limited, RSS-Expand, Matrix 2 of 5)
2D	PDF 417, Micro PDF 417, QR Code, Micro QR, Data Matrix, Aztec, Maxicode
Depth of Field Code 39 (5mil)	25 mm - 70 mm
Depth of Field DataMatrix (10mil)	25 mm - 60 mm
Depth of Field EAN 13 (13mil)	30 mm - 85 mm
Depth of Field PDF417 (6.67mil)	30 mm - 50 mm
Depth of Field QR (15mil)	15 mm - 75 mm
Field of View Horizontal	68°
Field of View Vertical	51°
Illumination	White LED
Image Sensor	640 x 480 CMOS
Minimal Print Contrast	25%
Motion Tolerance	1.5 m/s
Scan Angle Pitch	±60°
Scan Angle Roll	360°
Scan Angle Skew	±60°

Physical

Current @ 5VDC Operating	Non NFC: 215 mA (typical), 578 mA (max), NFC: 253 mA (typical), 736 mA (max)
Current @ 5VDC Standby	Non NFC: 120 mA, NFC: 144 mA
Dimensions	With foam: 61.5(W) x 65.5(D) x 18.8(H) mm, With glass: 61.5(W) x 65.5(D) x 18.3(H) mm
Input Voltage	5 VDC ±5%
Interfaces	TTL-232, RS-232, USB
Notifications	Beep
Power Consumption	Non NFC: 1.07 W, NFC: 1.26 W
Weight	With foam: 27.4 g, With glass: 36.4 g

Wireless

NFC	NFC Function Available, Reading distance of NFC card 0-40mm (typical)
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Environmental

Ambient Light	0 to 100,000 lux (natural light)
Humidity	5% to 95% (non-condensing)
Operating Temperature	-20°C to 60°C (-4°F to 140°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)

Software

Configuration Tools	EasySet
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Certifications

Certifications Hardware	FCC Part15 Class B, CE EMC Class B, RoHS
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Warranty

Warranty Standard	2 Years
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Accessories

Accessories Standard	USB cable, RS-232 cable, 75mm flexible flat cable (FFC)
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