

# EM20

## OEM Scan Engine



## Features

### ◆ Fast and efficient barcode scanning.

The EM20 is a Newland 2D OEM Scan Engine that is easy to use for both your employees and customers. The scanner picks up on barcodes easily and takes almost no time to master.

### ◆ Easy integration.

The EM20 is designed as an OEM Scan Engine with minimal casing to incorporate the illumination needed to accomplish optimum scanning. The resulting flexibility makes it a suitable solution for a wide variety of applications.

### ◆ Multiple interfaces.

The EM20 supports USB and TTL-232 interfaces to meet diverse customer needs.

### ◆ Minimal footprint.

With a shallow form factor (65.1mm), fitting the device into small spaces is simple and hassle free.

### ◆ Designed to optimize scanning from a mobile phone screen.

A wide viewing angle and shallow depth of field makes the EM20 an ideal OEM Scan Engine for scanning from a mobile phone screen. It was designed with added illumination that optimizes phone screen reading.

Work faster, more efficiently and more effectively, simplifying and speeding up the process for your customers.

## Application Scenarios

Kiosks ; self-service cabinets used in e-commerce, express delivery services and smart homes; ATMs; queue machines; lottery machines; certificate makers.

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<b>Performance</b>	Image Sensor	752×480 CMOS		
	Light Source	White LED		
	Symbologies	2D	PDF417, QR Code (QR1/2, Micro), Data Matrix (ECC200, ECC000, 050, 080, 100, 140)	
		1D	Code128, UCC/EAN-128, AIM-128, EAN-8, EAN-13, ISBN/ISSN, UPC-E, UPC-A, Interleaved 2 of 5, ITF-6, ITF-4, Matrix 2 of 5, Industrial 25, Standard 25, Code 39, Codabar, Code 93, Code 11, Plessey, MSI-Plessey, GS1-DataBar™(RSS), (RSS-14, RSS-Limited, RSS-Expand)	
	Resolution	≥5mil		
	Typical Depth of Field	EAN-13	10mm-55mm (13mil)	
		PDF 417	15mm-35mm (6.67mil)	
		Data Matrix	15mm-40mm (10mil)	
		QR Code	10mm-50mm (15mil)	
	Symbol Contrast	≥30% reflectance difference		
	Scan Angle**	Roll: 360°, Pitch: ±40°, Skew: ±40°		
	Field of View	Horizontal 80°, Vertical 56°		
<b>Mechanical/</b>	Interface	TTL-232, USB (HID-KBW, COM Port Emulation, HID-POS)		
	<b>Electrical</b>	Operating Voltage	3.0~5.5VDC	
Current@5VDC		Operating	160mA	
	Sleep	12mA		
Dimensions	65.1(D)×61.1(W)×43.6(H)mm			
Weight	41.5g			
<b>Environmental</b>	Operating Temperature	-20°C~+60°C (-4°F~140°F)		
	Storage Temperature	-40°C~+80°C (-40°F~176°F)		
	Humidity	5%~95% (non-condensing)		
	Ambient Light	0~100000lux (natural light)		
<b>Accessories</b>	USB Cable	Used to connect the NLS-EM20 to a host device.		

\*\*Test conditions: Code 39; 3 Bytes; Resolution=10mil; W:N=3:1; PCS=0.8; Barcode Height=11mm; Scan Distance=120mm; T=23°C; Illumination=300lux.

\*Specifications are subject to change without notice.\*

Version: V1.0

**Newland EMEA**  
+31 (0) 345 87 00 33  
info@newland-id.com

**Newland D-A-CH**  
+49 (0) 294 298 76758  
info@newland-id.de

**Newland UK**  
+44 (0) 1442 212 020  
sales@newland-id.co.uk

**Newland Nordic & Baltic**  
+46 (0) 708 847 767  
nordic@newland-id.com

**Newland Ibérica**  
+34 (0) 93 303 74 66  
info@newland-id.es

**Newland France**  
+31 (0) 345 87 00 33  
france@newland-id.com

**Newland Middle East**  
+31 (0) 345 87 00 33  
middleeast@newland-id.com

**Newland South Africa**  
+27 (0) 11 553 8010  
info@newland-id.co.za

**Newland Italy**  
+39 (0) 342 056 2227  
italy@newland-id.com

**Newland Russia**  
+31 (0) 345 87 00 33  
russia@newland-id.com