



EM20-M37
OEM scan engine

FEATURES

Fast and efficient barcode scanning.

The EM20-M37 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-M37 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-M37 supports USB and TTL-232 interfaces to meet diverse customer needs.

Minimal footprint.

With a shallow form factor (65.2mm), 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-M37 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.

Performance	Image Sensor	752 * 480 CMOS		
	Illumination	White LED		
	Symbologies	2D	PDF 417, QR Code, Micro QR, Data Matrix, Aztec, Maxicode, Chinese Sensible Code, GM Code, Micro PDF417 Code, Code One	
		Postal	USPS Postnet, Royal Mail, KIX Post, Australian Postal, etc.	
	1D	EAN-8, EAN-13, UPC-E, UPC-A, Code 128, UCC/EAN128, I2Of5, ITF-14, ITF-6, Matrix 25, CodaBar, Code 39, Code 93, ISSN, ISBN, Industrial 25, Standard 25, Plessey, Code11, MSI-Plessey, UCC/EAN Composite, GS1 Databar, China Post 25, Code 49, Code 16K		
		Resolution*		≥4mil
		Typical Depth of Field*		EAN-13 (13mil): 25mm-50mm PDF417 (6.7mil): 25mm-35mm Data Matrix (10mil): 30mm-35mm QR Code (15mil): 25mm-45mm
	Min. Symbol Contrast*	25%		
	Scan Angle**	Roll: 360°, Pitch: ±55°, Skew: ±45°		
	Field of View	Horizontal 85°, Vertical 54.3°		
Mechanical/	Interface	TTL-232, USB		
	Electrical	Operating Voltage	12-pin FPC connector: 3.3-5VDC±5% 5-pin box connector: 5VDC±5%	
Rated Power Consumption		717mW (typical)		
Current@5VDC	Operating	140mA (typical), 148mA (max.)		
	Standby	57mA		
Dimensions	65.5(W)×61.5(D)×44(H)mm (max.)			
Weight	40g			
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% to 95% (non-condensing)		
	Ambient Light	0~100,000lux (natural light)		
Certifications	FCC Part15 Class B, CE EMC Class B			
Accessories	NLS-EVK	Software development board for the NLS-EM20-M37, equipped with a trigger button, beeper and RS-232 & USB interfaces.		
	Cable	USB	Used to connect the NLS-EVK to a host device.	
		RS-232	Used to connect the NLS-EVK to a host device.	
	Power Adapter	DC5V power adapter to power the NLS-EVK with RS-232 cable.		

*Test conditions: T=23°C; Illumination=300lux using incandescent lamp; sample barcodes made by Newland.

Version: V1.0

**Test conditions: Scan Distance=(min. DOF + max. DOF)/2; T=23°C; Illumination=300lux using incandescent lamp; 2D: QR Code; 10 Bytes; Resolution=15mil; PCS=0.8.

* Specifications are subject to change without notice.*

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

D-A-C-H
+49 (0) 6182 82916-16
info@newland-id.de

United Kingdom
+44 (0) 7771 631387
info@newland-id.co.uk

France
+39 (0) 345 8804096
france@newland-id.com

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

Benelux
+31 (0) 345 87 00 33
benelux@newland-id.com

Turkey
+90 (0) 544 538 40 49
turkey@newland-id.com

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

Middle East
+39 (0) 345 8804096
middleeast@newland-id.com

Italy
+39 (0) 342 0562227
italy@newland-id.com

South Africa
Gauteng: +27 (0) 11 553 8010
Cape Town: +27 (0) 21 9140819
info@newland-id.co.za

Nordic & Baltic
+46 (0) 70 88 47 767
nordic@newland-id.com

Iran
+90 (0) 544 538 40 49
iran@newland-id.com