



**EM20**  
OEM scan engine

-  1D
-  2D
-  CMOS
-  USB
-  TTL-232

## FEATURES

The EM20 is a Newland 2D OEM Scan Engine that is easy to use for both your employees and

The EM20 is designed as an OEM Scan Engine with minimal casing to incorporate the illumination

The EM20 supports USB and TTL-232 interfaces

A wide viewing angle and shallow depth of field designed with a wide field of view that optimizes

Designed with a wide field of view that optimizes

### Application Scenarios

Kiosks; self-service cabinets used in e-commerce • express delivery services and

VPDUW KRPHV i \$70V TXHXH PDFKLQHV ORWWHU\ PDFKLQHV FHUWL FD

|                      |                                     |   |  |  |
|----------------------|-------------------------------------|---|--|--|
| <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

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