



1D & 2D



CMOS



CPU



Superior



Megapixel



LED  
aimer



Dual  
Interface



EasySet



Warranty  
2 Years



USB



**EM2037V4**

OEM Scan Engines

## Features

### 6th Generation UIMG Technology.

The EM2037 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 faced with. Additionally, it allows the firmware to be adapted to your specific environment and application.

### Advanced Megapixel Technology.

Thanks to advanced megapixel imaging technology, the EM2037 captures high-resolution images with impressive speed and ease. It is particularly suited for scanning from a screen. Additionally OCR, high-density, dual barcodes and DotCode prove no challenge for this flagship scan engine.

### Customizable Lenses.

The EM2037 offers a choice of Standard Range (SR) or High Density (HD) lens. This allows you to match the engine configuration to your scanning distance requirements.

### Intelligent Sensors.

The EM2037's innovative AEC (Automatic Exposure Control) sensor automatically adjusts to optimal light conditions. This ensures high-contrast images when reading off mobile screens or in dark environments.

### Direct Connection to PC.

The EM2037 is set up with an additional 5-pin connector on its decoder board. This way, you can directly connect the engine to your computer via a universal USB interface.

### EasySet Configuration.

The EM2037 is compatible with our master configuration software EasySet. Built for Windows OS, this software is a useful tool to integrators for building and testing configurations, cloning and deploying configurations, and updating scanner firmware.

## Suggested industries



Healthcare



Industrial



Manufacturing



Parking



20 mm

39.5 mm

25.4 mm

# EM2037V4 Technical specifications

## Data Capture

|                                    |                                                                                                                                                                                                                                                                                             |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1D                                 | All major 1D symbologies, including 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, Code 11, MSI-Plessey, UCC/EAN Composite, GS1 Databar, China Post 25, Code 49, Code 16K. |
| 2D                                 | All major 2D symbologies, including PDF 417, QR Code, Micro QR, Data Matrix, Aztec, Maxicode, Chinese Sensible Code, GM Code, Micro PDF417 Code, Code One.                                                                                                                                  |
| Image Sensor                       | 1280 * 800 CMOS                                                                                                                                                                                                                                                                             |
| Illumination                       | Red LED                                                                                                                                                                                                                                                                                     |
| Aiming                             | Red LED                                                                                                                                                                                                                                                                                     |
| Depth of Field EAN 13 (13mil)      | SR: 55mm-365mm                                                                                                                                                                                                                                                                              |
| Depth of Field Code 39 (3.3mil)    | HD: 50mm-90mm                                                                                                                                                                                                                                                                               |
| Depth of Field Code 39 (5mil)      | SR 70mm-180mm HD: 50mm-105mm                                                                                                                                                                                                                                                                |
| Depth of Field PDF417 (5mil)       | HD: 45mm-95mm                                                                                                                                                                                                                                                                               |
| Depth of Field PDF417 (6.67mil)    | SR: 55mm-175mm                                                                                                                                                                                                                                                                              |
| Depth of Field DataMatrix (6.7mil) | HD: 45mm - 75mm                                                                                                                                                                                                                                                                             |
| Depth of Field DataMatrix (10mil)  | SR: 55mm-220mm                                                                                                                                                                                                                                                                              |

## Performance

|                          |      |
|--------------------------|------|
| Minimal Print Contrast   | 25%  |
| Scan Angle Roll          | 360° |
| Scan Angle Pitch         | ±55° |
| Scan Angle Skew          | ±55° |
| Field of View Horizontal | 39°  |
| Field of View Vertical   | 24°  |

## Physical

|                          |                                                     |
|--------------------------|-----------------------------------------------------|
| Dimensions (mm)          | 39.5(W)×25.4(D)×20(H)mm (max.)                      |
| Weight                   | 11g                                                 |
| Material                 | PC, PMMA                                            |
| Interfaces               | TTL-232, USB                                        |
| Input Voltage            | 3.3VDC via 12-pin FPC; 5VDC via 5-pin box connector |
| Current @ 5VDC Operating | 276.6mA (typical), 332.3mA (max.)                   |
| Current @ 5VDC Standby   | 57.4mA (typical)                                    |
| Power Consumption        | 1456.5mW (typical)                                  |
| Power Supply Input       | DC5V, 1.5A                                          |
| Power Supply Output      | AC100~240V, 50~60Hz                                 |

## Environmental

|                       |                                |
|-----------------------|--------------------------------|
| Ambient Light         | 0~100,000lux (natural light)   |
| Operating Temperature | -20°C to 60°C (-4°F to 140°F)  |
| Storage Temperature   | -40°C to 70°C (-40°F to 158°F) |

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Specifications are subject to change without notice

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# EM2037V4 Technical specifications

|                     |                                                    |
|---------------------|----------------------------------------------------|
| Humidity            | 5%~95% (non-condensing)                            |
| Accessories         |                                                    |
| Standard            | 75mm flexible flat cable (FFC)                     |
| Optional            | EVK2037, RS232 Cable, Adapter, USB Cable           |
| Software            |                                                    |
| Configuration Tools | EasySet                                            |
| Certifications      |                                                    |
| Hardware            | CE EMC Class B, RoHS, IEC62471, FCC Part15 Class B |
| Warranty            |                                                    |
| Standard            | 2 years                                            |