Newland AIDC
SCANNING MADE SIMPLE

EM2037 V5

Scan Engines



1D & 2D | AI-Powered Barcode Detection | CMOS | Compact Size | DPM | EasySet

LED Aimer | Megapixel | OCR | Superior Level | TTL-232 | USB

Warranty 2 Years





Features

6th Generation UIMG Technology.
Using Newland's advanced UIMG scanning technology, the EM2037 V5 offers exceptional performance in scanning both 1D barcodes and 2D codes, even if they are damaged or located on reflective and curved surfaces.

Megapixel Imaging and OCR.
The EM2037 V5 is equipped with advanced Megapixel imaging technology, enabling it to capture high-resolution images and barcodes quickly and easily. Additionally, it features cutting-edge OCR technology, enabling it to scan and accurately extract text. This makes the device ideal for applications that require precise data capture from IDs and documents.

AI-Powered Barcode Detection.
The EM2037 V5 is equipped with Newland's AI-Powered Barcode Detection technology, which is also found in several handheld and fixed-mount scanners in Newland's range. This advanced technology enables rapid, accurate, and reliable barcode decoding. By utilizing computer vision and self-learning capabilities, the scan engine efficiently analyzes images to detect, locate, and read barcodes. The self-learning feature enables automatic adjustments across various scenarios, enhancing the EM2037 V5's barcode decoding performance and speed.

Two Lens Configurations.
The EM2037 V5 comes in two versions: one with a Standard Range (SR) lens and another with a High Density (HD) lens. This option allows you to select the version that best suits your application's scanning requirements.

Host Interfaces and Development Tools.
The EM2037 V5 supports both USB and TTL-232 interfaces, enabling the engine to meet a variety of customer needs. It comes with an SDK and APIs that empower software developers to create their own applications. These features highlight the flexibility of the scanning engine, which is utilized across a wide range of applications.

Compact Split-Type Design.
The EM2037 V5 features a split-type design, with the imager and decoder board separated. This makes it ideal for various applications. Its compact, lightweight design ensures the scan engine can adapt to the host system, rather than requiring the host to accommodate it.

2 Years Full Warranty

EasySet

TECHNICAL SPECIFICATIONS

EM2037 V5

Data Capture

1D	EAN 8, EAN 13, UPC E, UPC A, Code128, UCC/EAN128, I2Of5, Matrix 25, ITF14, ITF6, CodaBar, Code39, Code93, ISSN, ISBN, Code 49, Code11, Standard25, Industrial25, MSI Plessey, China Post 25, GS1 Databar, UCC/EAN Composite, Plessey, Code 16K
2D	PDF417, QR Code, Micro QR, DataMatrix, Aztec, MaxiCode, GM Code, Chinese Sensible Code, MicroPDF417 Code, Code One
Aiming	Red LED, Green LED
Depth of Field Code 39 (5mil)	SR: 60 mm - 260 mm; HD: 40 mm - 130 mm
Depth of Field DataMatrix (10mil)	SR: 55 mm - 220 mm; HD: 35 mm - 125 mm
Depth of Field EAN 13 (13mil)	SR: 60 mm - 460 mm; HD: 55 mm - 180 mm
Depth of Field PDF417 (6.7mil)	SR: 60 mm - 215 mm; HD: 35 mm - 120 mm
Depth of Field QR (15mil)	SR: 25 mm - 300 mm; HD: 25 mm - 160 mm
Digimarc	Digital watermark technology
Field of View Horizontal	48˚
Field of View Vertical	31˚
Illumination	White LED
Image Sensor	1280 x 800 CMOS
Minimal Print Contrast	25%
OCR	Default OCR: Passport; Optional OCR: date and general alphanumeric recognition Chinese ID Card, and China Travel Permit OCR.
Postal	USPS Portnet, USPS Intelligent Mail, Royal Mail, USPS Planet, KIX Post, Australian Postal, Japan Post
Resolution	≥3mil
Scan Angle Pitch	±55˚
Scan Angle Roll	360˚
Scan Angle Skew	±55˚

Physical

Current @ 5VDC Operating	300 mA (typical), 696 mA (max.)
Current @ 5VDC Standby	92 mA (typical)
Dimensions	39.5(W) × 25.4(D) × 20(H) mm (max.)
Input Voltage	12-pin FPC connector: 3.3-5 VDC ±5%, 8 pin DuPont connector: 3.3 5 VDC±5%
Interfaces	USB, TTL-232
Weight	11 g

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

Certifications

Certifications Hardware	FCC Part15 Class B, CE EMC Class B

Warranty

Warranty Standard	2 Years

Accessories

Accessories Optional	Software development board, USB cable, RS-232 cable

Newland AIDC EMEA
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Newland AIDC EMEA
Feel free to contact us or a partner near you.
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