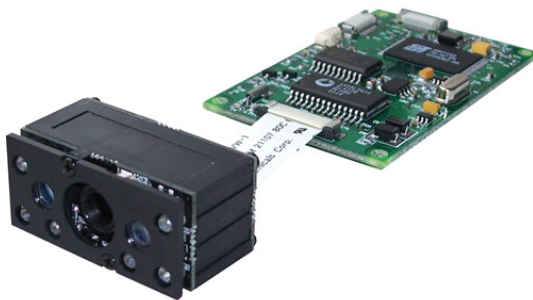




EM2027M

1D/2D CMOS Scan Engine



Designed for OEM applications, this high performance CMOS engine can easily be integrated into various solutions such as kiosks, ticketing machines, PDA's and many more.

Product Features

- **Ease of integration**

Compact and easy to integrate design, where the CMOS engine and decoder board can be placed separately into your solution. The small form factor enables easy integration into various solutions.

- **Advanced Technology**

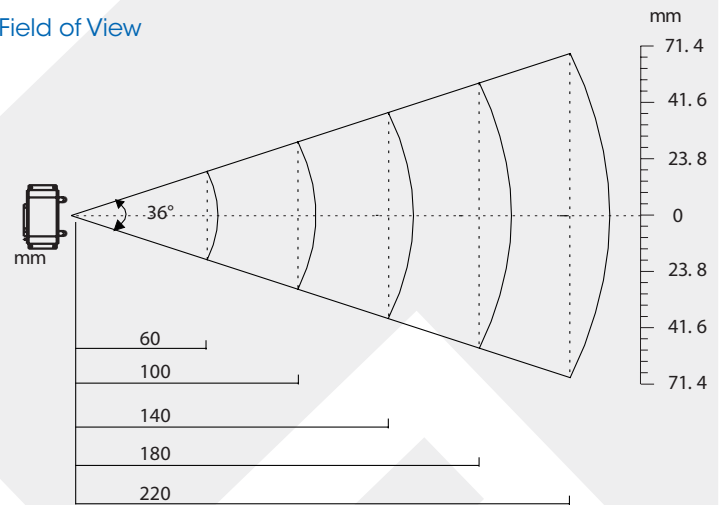
Includes core-technology **UIMG™**, which is independently designed and manufactured by Newland Auto-ID. **UIMG™** technology includes the optical, CMOS, digitizer, decoder, image processing & embedded systems. The scanner supports all global standard 1D barcode symbologies. Its' reading performance reaches and exceeds global standards. By using the accessories provided, the user can ideally set up the scanner to its user environment.

- **Intelligent Focus**

Advanced optical focusing system which senses the ambient environment and adjusts the optical automatically for a quick reading response.

EM2027M Decode Zones

- **Field of View**



- **Decode Distances**

Barcode	Density(mil)	Near(mm)	Far(mm)
Code 39	5	55	115
Code 39	10	30	215
PDF417	5	50	105
PDF417	10	30	215
QR Code	10	25	135
QR Code	15	25	210
Data Matrix	10	25	150
Data Matrix	15	20	220



EM2027 Specifications

Performance

Image Sensor	CMOS	
Resolving	EM2027M: 752 * 480	
Interface	RS232	
Symbologies	2D	PDF417, QR Code (Model 1/2), DataMatrix (ECC200, ECC000, 050, 080, 100, 140), Aztec, Chinese-Sensible Code, Maxicode, LP Code
	1D	Code128, EAN-13, EAN-8, Code39, UPC-A, UPC-E, Codabar, China post 25, Interleaved 2 of 5, ISBN/ISSN, Code 93, etc.
Precision	≥ 3mil	
Light Source	LED (630 nm ± 10 nm)	
Light Intensity	300 LUX (130 mm)	
Depth of Scan Field	45 mm ~ 400 mm	
PCS	≥ 25%	
Roll	360°	
Pitch	45°	
Yaw	45°	
Illumination	0 ~ 100,000 LUX	

Mechanical/ Electrical

Power Consumption	2 W	
Voltage	DC 5 V	
Current	Max	400 mA
	Working	300 mA
	Idle	1 mA
Weight	28g	

Environment

Operating Temperature	-5°C - +45°C
Storage Temperature	-40°C - +60°C
Humidity	5% - 95% (non-condensing)
Certificates	FCC Part15 Class B, CE EMC Class B

Accessories

Cradle

EVK2027 The Evaluation Kit for EM2027, with trigger, beep functions and USB, RS232 interfaces.

Flex Cable

This cable connect to the RS232 port of EVK2027 with a RJ45 port.

CBL2027R With a standard female RS232 port to connect to standard male RS232 port.

With a power port to accept power adapter supply.

CBL2027U This cable connect to the USB Slave port of EM2027 with a USB-B male port.

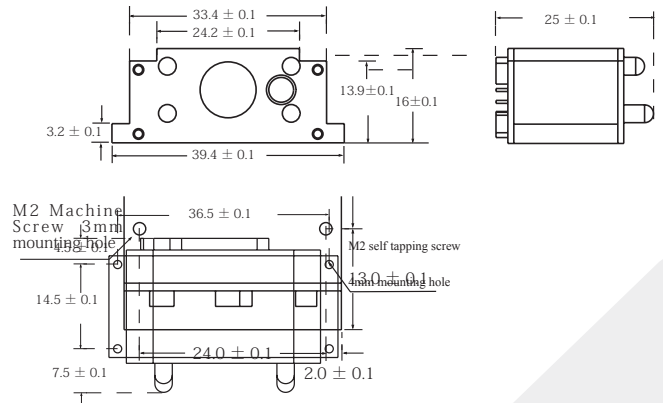
With a standard USB Slave port to connect to standard USB Host port.

Power

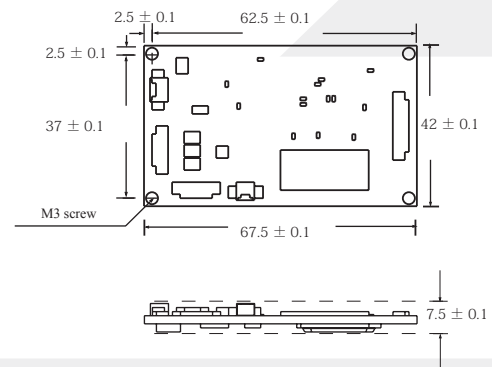
ADP50 The power adapter for EVK2027 by the CBL2027R.
Output: DC5V, 2A; Input: AC100~240V, 50~60HZ.

Dimension (Unit: mm)

EM2027M Sensor



Decode Board



Applicable Accessories

Integration Manual / Programming Guide

A manual to explain the user the basics of the scanner, how to integrate it and how to configure it. Furthermore, it enables the user to set the scanner to the specific wishes regarding scanning modes, readable barcodes and barcode formats.