



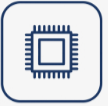
1d



2d



cmos



chip



usb



ttl-232



**EM3090**  
oem scan engines

## Features

### Unparalleled Barcode Reading Performance.

Improve speed and productivity with the EM3090. The engine scans 1D and 2D barcodes without delay and with a particularly exceptional performance in linear barcode reading. Through optimized design and Newland's sixth generation UIMG technology the EM3090 allows for first time every time scanning, even when a barcode is damaged or displayed on a screen set to its lowest brightness level.

### Multi-Interface.

The EM3090 supports USB and TTL-232 interfaces to meet diverse customer needs.

### Compact and Lightweight.

With seamless integration of the image sensor and decoder board, this compact and lightweight engine can be easily integrated into the most space-constrained devices, including handheld scanners, self-service kiosks, ATMs, lottery terminals and more.

### Low Power Consumption.

The advanced NLDC technology incorporated in the EM3090 helps reduce the power consumption and prolong the service life of the device.

### Application Scenarios.

Self-service cabinets used in e-commerce, express delivery services and smart homes, ATMs, kiosks, queue machines, lottery terminals, certificate makers and more.

## Application Scenarios



industrial



manufacturing



self service

# EM3090 technical specifications

<b>Performance</b>	Processor	0390 Chip+MCU	
	Image Sensor	CMOS 752*480	
	Illumination	Red LED 625±10 nm	
	Aiming	Green LED	
	Depth of Field EAN13 (13mil)	50-445mm	
	Depth of Field CODE 39 (5mil)	50-215mm	
	Depth of Field PDF417 (6.67mil)	70-160mm	
	Depth of Field Data Matrix (10mil)	60-150mm	
	Depth of Field QR (15mil)	35-210mm	
	Minimal Print Contrast	25%	
	Scan Angle Roll	360°	
	Scan Angle Pitch	±55°	
	Scan Angle Skew	±55°	
	Field of View Horizontal	36°	
	Field of View Vertical	23°	
	Scan Modes	Batch Mode, Trigger Mode, Sense Mode, Continuous Mode	
	Scan Rate	60 frames per second	
	<b>Data capture</b>	1D	Code 128, UCC/EAN-128, AIM128, 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-DataBarTM(RSS), (RSS-14, RSS-Limited, RSS-Expand)
		2D	PDF417, QR Code (QR1/2, Micro), Data Matrix (ECC200, ECC000, 050, 080, 100, 140), Chinese Sensible Code
<b>Physical</b>	Dimensions (mm)	28.0(W)×24.5(D)×13.9(H)mm	
	Weight	9.5g	
	Material	PC	
	Interfaces	TTL,USB	
	Input Voltage	3.3VDC±5%	
	Current @ 3.3VDC Operating	190mA	
	Current @ 3.3VDC Standby	7mA	
	Power Supply Input	DC5V, 1.5A	
	Power Supply Output	AC100~240V, 50~60Hz	
<b>Environmental</b>	Ambient Light	0~100,000lux (natural light)	
	Operating Temperature	-20°C~+55°C (-4°F~131°F)	
	Storage Temperature	-40°C~+80°C (-40°F~176°F)	
	Humidity	5%~95% (non-condensing)	
<b>Accessories</b>	Optional	EVK3030,RS232 Cable,Adapter,USB Cable	
	Standard	75mm FFC	
<b>Certifications</b>	Certifications	CE,FCC,RoHS,EN 62471	
<b>Warranty</b>	Warranty	2 years	