



1d



2d



CMOS

cmos



chip



Laser Aimer

laser aimer



usb



TTL-232

ttl-232



**EM3396**  
oem scan engines

## Features

### UIMG Technology.

Armed with Newland's fifth-generation of UIMG technology, the EM3396 can decode even poor quality barcodes with ease.

### Miniature and Ultralight Form Factor.

Ultra-compact, light and integrator-friendly, the EM3396 caters to miniaturization needs of OEM applications.

### Multi-Interface.

The EM3396 supports USB and TTL-232 interfaces to meet diverse customer needs.

### Two-In-One Design.

Seamless integration of the image sensor and decoder board make the EM3396 small, lightweight and easy to fit into even the most space-constrained equipment.

### Outstanding Power Efficiency.

The advanced NLDC technology incorporated in the scan engine 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, smart homes, ATMs, kiosks, queue machines, lottery machines, certificate makers.

## Application Scenarios



industrial



manufacturing



self service

# EM3396 technical specifications

<b>Performance</b>	Image Sensor	752×480 CMOS
	Illumination	Red LED 625nm±10nm
	Aiming	Laser diode 650nm
	Depth of Field EAN13 (13mil)	60mm-290mm (13mil)
	Depth of Field CODE 39 (5mil)	55mm-165mm(5mil)
	Depth of Field PDF417 (6.67mil)	55mm-135mm (6.7mil)
	Depth of Field Data Matrix (10mil)	55mm-130mm (10mil)
	Depth of Field QR (15mil)	45mm-175mm (15mil)
	Minimal Print Contrast	20%
	Scan Angle Roll	360°
	Scan Angle Pitch	±55°
	Scan Angle Skew	±55°
	Field of View Horizontal	36°
	Field of View Vertical	23°
	<b>Data capture</b>	1D
2D		PDF417, Data Matrix (ECC200, ECC000, 050, 080, 100, 140), QR Code, Chinese Sensible Code
<b>Physical</b>	Dimensions (mm)	21.5(W)×15.3(D)×11.8(H)mm
	Weight	5g
	Interfaces	RS-232, USB
	Input Voltage	3.3VDC±5%
	Current @ 3.3VDC Operating	142mA (typical), 204mA (max.)
	Current @ 3.3VDC Standby	<11mA
	Power Consumption	468mW (typical) 468mW (typical)
	Power Supply Input	DC5V
<b>Environmental</b>	Ambient Light	0~100,000lux
	Operating Temperature	-20°C to 55°C (-4°F to 131°F)
	Storage Temperature	-40°C to 70°C (-40°F to 158°F)
	Humidity	5%~95% (non-condensing)
<b>Accessories</b>	Optional	EVK, RS232 Cable, Adapter
	Standard	75mm FFC
<b>Certifications</b>	Certifications	FCC Part15 Class B, CE EMC Class B
<b>Warranty</b>	Warranty	2 years