| 1D | 2D | CMOS |
| chip | USB | TTL-232 |

EM3080-W
OEM scan engine

FEATURES

Advanced technology.

Newland's sixth-generati on UIMG technology makes the EM3080-W capable of reading most of the 1D & 2D barcodes with ease, even poorly printed.

Multiple interfaces.

The EM3080-W engine supports USB and TTL-232 interfaces, to meet diverse customer needs.

Compact and lightweight.

Seamless integration of imager and decoder board makes the scan engine extremely small and lightweight and easy to fit into miniature equipment.

All-round scanning capability.

The EM3080-W scan engine can read barcodes on virtually any medium - paper, plastic cards, mobile phones and LCD displays.

Outstanding power efficiency.

The advanced NLDC technology incorporated in the scan engine helps to reduce its power consumption and prolong its service life.

Application Scenarios

Data collectors • POS terminals • coffee makers • tablets • thin-and-light equipment • traditional self-service devices and more.

Performance	Image Sensor		640×480 CMOS
	Illumination		White LED
	Aimer		None
	Symbologies	2D	PDF417, QR Code, Data Matrix (ECC200, ECC000, 050, 080, 100, 140), Chinese Sensible Code
		1D	Code 128, EAN-13, EAN-8, Code 39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ITF-6, ITF-14, ISBN, Code 93, UCC/EAN-128, GS1 Databar, Matrix 2 of 5, Code 11, Industrial 2 of 5, Standard 2 of 5, Plessey, MSI-Plessey, etc.
	Resolution*		≥5mil
	Typical Depth of Field*	EAN-13	40mm-110mm (13mil)
		QR Code	30mm-70mm (15mil)
	Min. Symbol Contrast*		25%
	Scan Angle**		Roll: 360°, Pitch: ±45°, Skew: ±45°
	Field of View		Horizontal 69.5°, Vertical 54.8°, Diagonal 82.2°
Mechanical/ Electrical	Interface		TTL-232, USB (HID Keyboard, COM Port Emulation, HID-POS)
	Operating Voltage		3.3VDC±5%
	Rated Power Consumption		180.8mW (typical)
	Current@3.3VDC	Operating	55.1mA (typical), 100.5mA (max.)
		Standby	3.5mA
	Dimensions		15.5(W)×13.9(D)×9.7(H)mm (max.)
	Weight		2.2±0.2g
Environmental	Operating Temperature		-20℃ to 50℃ (-4°F to 122°F)
	Storage Temperature		-40℃ to 70℃ (-40°F to 158°F)
	Humidity		5% to 95% (non-condensing)
	Ambient Light		0~100,000lux (natural light)
Certifications			FCC Part15 Class B, CE EMC Class B
Accessories	NLS-EVK		Software development board for the NLS-EM3080-W, equipped with a trigger button, beeper and RS-232 & USB interfaces.
	Cable	USB	Used to connect the NLS-EVK to a host device.
		RS-232	Used to connect the NLS-EVK to a host device.
	Power Adapter		DC5V power adapter to power the NLS-EVK with RS-232 cable.

*Test conditions: T=23℃; Illumination=300lux using incandescent lamp; sample barcodes made by Newland.
**Test conditions: Scan Distance=(min. DOF + max. DOF)/2; T=23℃; Illumination=300lux using incandescent lamp; 2D: QR Code; 10 Bytes; Resolution=15mil; PCS=0.8.
* Specifications are subject to change without notice.*

Version: V1.0