Newland AIDC

SCANNING MADE SIMPLE

OEM SCAN ENGINES

COMPARISON CHART

Improve the efficiency and accuracy of your data capture.

Our comprehensive range of OEM scan engines ensures that there is always a suitable option for your needs. These devices come with a variety of features, including 1D scanning, 2D scanning for curved barcodes, and the ability to read codes on paper, plastic, and screens. They also include laser aiming for enhanced precision.

Whether customer-facing or integrated and out of direct sight, these scan engines are ideal for various applications, including click-and-collect, access control, medical equipment, self-service kiosk integration, and many more. Our OEM range is designed for easy embedding into your devices, enabling quick data capture and improving the efficiency of your business operations.

Newland's master configuration system, EasySet, is designed to quickly and efficiently configure all OEM scan engines in Newland's portfolio. This Windows software offers several options: you can send configurations directly to the scanner, save the configuration file for future deployment, or display the configuration as a series of barcodes in a single document.

Furthermore, all Newland scan engines can receive configurations and firmware updates from your host application, ensuring updates can be easily distributed to deployed devices with minimal effort and zero touch.

Check out our range of OEM Scan Engines and find your next solution.

Discover our
OEM Scan Engines Portfolio

Product	EM1365-EX	EM2037 V4 SR/HD	EM20-80 V2	EM20-85	EM27	EM3080-W V2	EM3088-W	EM3296 V4	EM3396 V2	EM50S SERIES	N1	N1-ER	N1-W	RVM RING SCANNER SERIES
Category	Standard	Superior	Standard	Standard	Entry	Entry	Superior	Standard	Standard	Superior	Standard	Standard	Standard	---
Scanning Capabilities	1D	1D + 2D	1D + 2D	1D + 2D	1D + 2D	1D + 2D	1D + 2D	1D + 2D	1D + 2D	1D + 2D	1D + 2D	1D + 2D	1D + 2D	1D + 2D
Image Sensor	CCD 2500	CMOS 1280x800	CMOS 640x480	CMOS 640x480	CMOS 640x480	CMOS 640x480	CMOS 1280x800	CMOS 640x480	CMOS 752x480	CMOS 1280x800	CMOS 640x480	CMOS 640x480	CMOS 640x480	CMOS 640x480
Illumination	Red	Red	White	White	White	White	White	Red	Red	White	White	White	White	White
Resolution	≥3mil	---	---	---	---	---	≥3mil (Code 39)	---	---	---	≥3mil	3mil(1D), 6.67mil(2D)	≥3mil (1D), ≥ 6.67mil (2D)	1D: 5mil
Depth Of Field	60 mm - 600 mm	45 mm - 365 mm	0 mm - 110 mm	15 mm - 85 mm	15 mm - 90 mm	30 mm - 110 mm	20 mm - 85 mm	35 mm - 365 mm	45 mm - 290 mm	40mm - 500 mm	30 mm - 350 mm	65 mm - 1400 mm	20 mm - 60 mm	---
Aiming Pattern	● LED Aimer	● LED Aimer	*No Aimer	*No Aimer	*No Aimer	*No Aimer	*No Aimer	● LED Aimer	✛ Laser Aimer	✛ Laser Aimer	● LED Aimer	+ Laser Aimer	● LED Aimer	---
Scanning Range	Standard Range	Standard Range	Standard Range	Standard Range	Standard Range	Close Range	Close Range	Standard Range	Standard Range	Standard Range	Standard Range	Extended Range	Close Range	---
Scan Angle	Pitch: ±65°, Skew: ±65°	Pitch: ±55°, Skew: ±55°	Roll: 360°, Pitch: ±40°, Skew: ±45°	Roll: 360°, Pitch: ±60°, Skew: ±60°	Roll: 360°, Pitch: ±60°, Skew: ±60°	Roll: 360°, Pitch: ±45°, Skew: ±45°	Roll: 360°, Pitch: ±50°, Skew: ±50°	Roll: 360°, Pitch: ±50°, Skew: ±50°	Roll: 360°, Pitch: ±55°, Skew: ±55°	Roll: 360°, Pitch: ±60°, Skew: ±60°	Roll: 360°, Pitch: ±60°, Skew: ±60°	Roll: 360°, Pitch: ±60°, Skew: ±60°	Roll: 360°, Pitch: ±50°, Skew: ±50°	Roll: 360°, Pitch: ±60°, Skew: 360°
Field Of View	Horizontal: 43°	H: 39°, V: 24°	H: 68°, V: 51°	H: 68°, V: 51°	H: 68°, V: 51°	H: 69.5°, V: 54.8°	H: 99°, V: 72.4°, D: 109°	H: 44°, V: 33.2°	H: 36°, V: 23°	H: 42°, V: 28°	H: 42°, V: 28°	H: 28°, V: 21°	H: 68°, V: 51°	---
Minimal Print Contrast	30%	25%	30%	25%	25%	25%	25%	25%	20%	25%	25%	20%	25%	---
Input Voltage	3.3VDC	5VDC	3.3VDC	5VDC	5VDC	3.3VDC	3.3VDC	3.3VDC	3.3VDC	3.3VDC	3.3VDC	3.3VDC	3.3VDC	24VDC
Operating Current	21 mA (typical), 88 mA (max)	276.6 mA (typical), 332.3 mA (max)	141 mA (max)	Non NFC: 215 mA (typical), 578 mA (max) NFC: 253 mA (typical), 736 mA (max)	196 mA (typical), 616 mA (max)	55.1 mA (typical), 105 mA (max)	423mA (max)	100mA (typical), 168mA (max.)	116 mA (typical), 195mA (max.)	269mA (RMS typical), 399mA (RMS max)	138 mA (typical)	176 mA (typical)	68 mA (typical)	<700 mA
Dimensions	28.2(L) x 21.6(W) x 8.6(H) mm	39.5(L) x 25.4(W) x 20(H) mm	65.5(L) x 61.5(W) x 31.9(H) mm	With foam: 65.5(L) x 61.5(W) x 31.9(H) mm With glass: 65.5(L) x 61.5(W) x 18.3(H) mm	With foam: 55.0(L) x 34.4(W) x 13.2(H) mm With glass: 55.0(L) x 34.4(W) x 12.7(H) mm	15.5(L) x 13.9(W) x 9.7(H) mm	21.7(L) x 14.5(W) x 12(H) mm	21.8(L) x 15.3(W) x 11.8(H) mm	21.5(L) x 15.3(W) x 11.8(H) mm	EM50S-10: 21.7(L) x 14.7(W) x 11.9(H) mm EM50S-20, Imager: 21.5(L) x 10.2(W) x 8.6(H) mm Decoder board: 21.5(L) x 21.5(W) x 4.2(H) mm"	21.5(L) x 9.0(W) x 7.0(H) mm	23.8(L) x 10.5(W) x 7(H) mm	23.8(L) x 7.5(W) x 7(H) mm	335(L) x 169(W) x 335(H) mm
Interfaces	TTL-232, USB 1.1	TTL-232, USB	TTI-232, RS-232, USB	TTI-232, RS-232, USB	RS-232, USB	TTL-232, USB	TTL-232, USB	TTL-232, USB	RS-232, USB	---	TTL-232, USB	TTL-232, USB	TTL-232, USB	RS-232 (RJ50), USB (Type C)
Power Consumption	69 mW	1456.5 mW	466 mW	Non NFC: 1.07 W NFC: 1.26 W	980 mW	181.8 mW	181.8 mW (Typical)	330 mW	383 mW	888 mW (typical)	456 mW (typical)	581mW (typical)	---	---
Weight	5.7 g	11 g	33 g	With Foam: 27.4 g With Glass: 36.4 g	With Foam: 14.2 g With Glass: 17.9 g	2.2±0.2 g	3 g	4 g	5 g	4 g	1.2 g	2 g	1.2 g	2610 g
Operating Temperature	-20°C to 55°C	-20°C to 60°C	-40°C to 60°C	-20°C to 60°C	-20°C to 60°C	-20°C to 50°C	-20°C to 60°C	-20°C to +60°C	-20°C to 55°C	-20°C to 60°C	-20°C to 55°C	-20°C to 60°C	-20°C to 55°C	-30°C to 45°C
Storage Temperature	-40°C to 70°C	-40°C to 70°C	-40°C to 75°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-50°C to 85°C
Warranty	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years