



Newland AIDC
Scanning Made Simple



NLS-CM60E

OEM SOFTWARE DECODING SCAN ENGINE

FEATURES

○ **UIMG® Technology**

Armed with Newland's **UIMG®** technology, the scan engine can swiftly and effortlessly decode even poor-quality barcodes (e.g., low contrast, laminated, damaged, torn, warped or wrinkled).

○ **Clear Laser Aimer for Acuscan**

The NLS-CM60E provides a laser-generated crosshair aiming pattern that is clear and bright even in bright sunlight, ensuring first time accurate aim.

○ **Compact & Lightweight Design**

Seamlessly combining the imager sensor and aimer, the scan engine achieves a compact and lightweight form factor, perfectly suited for miniature equipment. Empower next-generation slim designs with exceptional imaging performance.

○ **User-friendly Illumination**

Soft lighting system without flicker, no glare, no visual fatigue even under continuous high intensity working conditions.



1D Barcode



2D Barcode



CMOS



Laser Aimer



Megapixel



MIPI



IIC

NLS-CM60E

Performance

Image Sensor		1280 * 800 CMOS
Illumination		3000K white LED
Aiming		650nm red laser
Symbolologies	2D	PDF417, Micro PDF417, QR Code, Micro QR, Data Matrix, Aztec, Chinese Sensible Code, Maxicode, etc.
	1D	EAN-13, EAN-8, UPC-A, UPC-E, Code 128, Code 39, Codabar, UCC/EAN-128, RSS, ITF, ITF14, ITF6, ISSN, ISBN, Standard 25, Matrix 25, Industrial 25, Plessey, MSI Plessey, Code 11, Code 93, GSI Composite, etc.
Resolution	1D	≥3mil
Typical Depth of Field ¹	EAN-13	55mm-610mm (13mil)
	PDF 417	110mm-230mm (6.7mil)
	Code 39	80mm-300mm (5mil)
	Data Matrix	90mm-280mm (10mil)
	QR Code	55mm-400mm (15mil)
Min. Symbol Contrast		25%
Scan Angle ²		Roll: 360°, Pitch: ±50°, Skew: ±50°
Field of View		Horizontal 42°, Vertical 28°

Physical

Interface		IIC, MIPI
Operating Voltage		VIMG:3.3VDC±5% VLED: 3.3VDC±5%
Current	Operating ³	292mA (typical) 706mA (max.)
	Idle	2.5mA
Dimensions		23.2(W)×10.1(D)×7.0(H)mm (max.)
Weight		1.7g

Environmental

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% to 95% (non-condensing)
Ambient Light	0-100,000lux (natural light)

Certificates

Certificates & Protection	FCC Part 15 Class B, CE EMC Class B, RoHS
---------------------------	---

Accessories

Cable	Optional	25-PIN FPC cable used to connect the NLS-EVK to a host device.
-------	----------	--

¹ Test conditions: T=23°C; Illumination=300lux; sample printed barcodes made by Newland.

² Test conditions: Scan Distance= (min. DOF + max. DOF)/2; T=23°C; Illumination=300lux;

2D: QR Code; 10 Bytes; Resolution=15mil; PCS=0.8

³ Test conditions: Scan Distance= (min. DOF + max. DOF)/2; test in the normal mode.

Specifications are subject to change without notice.

Version: V1.2

Newland AIDC

Add: No.1 Rujiang West Rd.,
Mawei, Fuzhou, Fujian 350001, China
Tel: +86-591-83979500
Fax: +86-591-83979216
Email: info@newlandaidc.com
Web: www.newlandaidc.com

Asia Pacific

Add: 6 Raffles Quay #14-06
Singapore 048582
Email: info@newlandaidc.com

Europe & Middle East

Add: Rolweg 25, 4104 AV Culemborg,
The Netherlands
Tel: +31 (0) 345 87 00 33
Email: sales@newland-id.com
Tech Support: tech-support@newland-id.com

North America & Latin America

Add: 46559 Fremont Blvd.,
Fremont, CA 94538, USA
Tel: +1 510 490 3888
Fax: +1 510 490 3887
Email: info@newlandaidc.com

NLS-CM60E

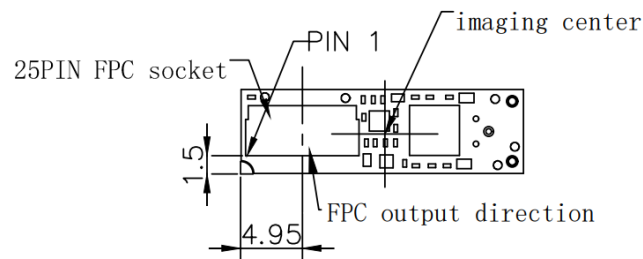
The following table lists the pin functions of the 25-pin FPC connector.

PIN#	Signal	I/O	Function
1	VIMG	-	3.3VDC±5% power supply for the engine
2	VIMG	-	3.3VDC±5% power supply for the engine
3	VIMG	-	3.3VDC±5% power supply for the engine
4	VLED	-	3.3VDC±5% power supply for illumination
5	VLED	-	3.3VDC±5% power supply for illumination
6	VLED	-	3.3VDC±5% power supply for illumination
7	EXT_IO	I/O	Reserved
8	GND	-	Power-supply ground
9	EXT_IO	I/O	Reserved
10	NC	-	
11	GND	-	Power-supply ground
12	I2C_SDA	I/O	I2C data signal
13	I2C_SCL	I/O	I2C clock signal
14	GND	-	Power-supply ground
15	GND	-	Power-supply ground
16	GND	-	Power-supply ground
17	MIPI_MCN	O	MIPI clock signal
18	MIPI_MCP	O	MIPI clock signal
19	GND	-	Power-supply ground
20	MIPI_MD1N	O	MIPI data lane 1
21	MIPI_MD1P	O	MIPI data lane 1
22	GND	-	Power-supply ground
23	MIPI_MD0N	O	MIPI data lane 0
24	MIPI_MD0P	O	MIPI data lane 0
25	GND	-	Power-supply ground

NLS-CM60E

Interface

Pinouts

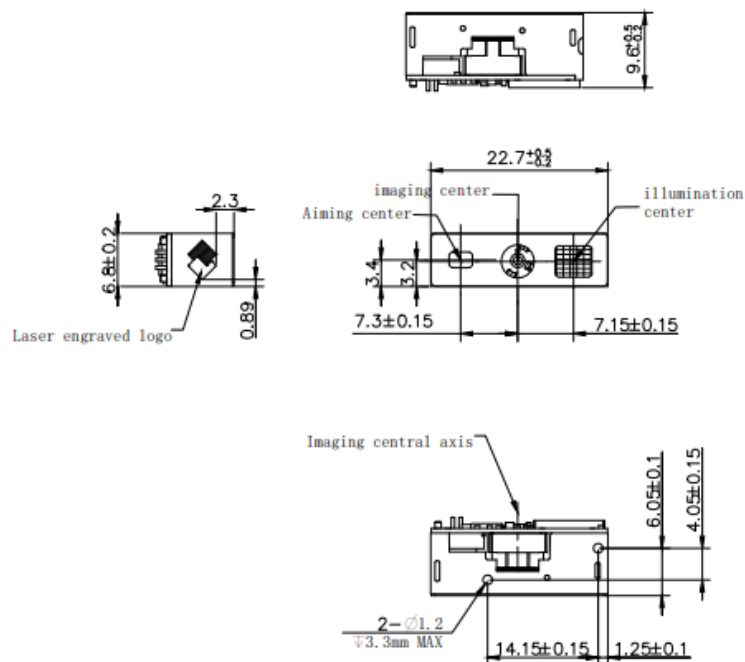


Mechanical

Mounting

Dimensions

(unit: mm)



Dimensions: 23.2(W)×10.1(D)×7.0(H)mm (max.)

Specifications are subject to change without notice.

Version: V1.2

Newland AIDC

Add: No.1 Rujiang West Rd.,
Mawei, Fuzhou, Fujian 350001, China
Tel: +86-591-83979500
Fax: +86-591-83979216
Email: info@newlandaidc.com
Web: www.newlandaidc.com

Asia Pacific

Add: 6 Raffles Quay #14-06
Singapore 048582
Email: info@newlandaidc.com

Europe & Middle East

Add: Rolweg 25, 4104 AV Culemborg,
The Netherlands
Tel: +31 (0) 345 87 00 33
Email: sales@newland-id.com
Tech Support: tech-support@newland-id.com

North America & Latin America

Add: 46559 Fremont Blvd.,
Fremont, CA 94538, USA
Tel: +1 510 490 3888
Fax: +1 510 490 3887
Email: info@newlandaidc.com