www.newlandaidc.com

Newland AIDC
Scanning Made Simple

NLS-FM431

FIXED MOUNT BARCODE SCANNER

FEATURES

UIMG® Technology

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

Automatic Exposure Control (AEC)

The sensor in the NLS-FM431 automatically adjusts the supplementary lighting duration based on the light reflected off barcode.

Improved Motion Tolerance

NLS-FM431 can capture and decode the barcode in motion up to 3.5m/s.

Dual Aimer Systems

The FM431 contains a red laser aimer that produces a crosshair aiming pattern. It is clear and bright even in bright sunlight, ensuring first time accurate aim. Besides, the scanner provides a green LED aimer.

Green LED | CMOS | 1D Barcode | 2D Barcode | USB | RS232 | OCR | Laser Aimer | IR

NLS-FM431

Performance

Image Sensor		1280 * 800 CMOS
Illumination		3000K white LED
Aiming		518nm green LED
		650nm red laser aimer
Symbologies	2D	PDF417, QR Code, Data Matrix, Aztec, Chinese Sensible Code, Maxicode, Micro QR, Micro PDF417, GM Code , Code One
	1D	Code 128, EAN-8, EAN-13, UPC-E, UPC-A, Coupon, Interleaved 2/5, ITF-14, ITF-6, Matrix 2/5, Code 39, Codabar, Code 93, China Post 2/5, UCC/EAN-128, GS1 Databar, GS1 Composite, Code 11, ISBN, ISSN, Industrial 2/5, Standard 2/5, Plessey, MSI-Plessey, AIM 128, ISBT 128, Code 49, Code 16K
	Postal	USPS Postnet, USPS Intelligent Mail, Royal Mail, USPS Planet, KIX Post, Australian Postal, Japan Post
	OCR	Passport OCR, Chinese ID Card, China Travel Permit OCR
Resolution	1D	≥3mil
Motion Tolerance		3.5m/s
Typical Depth of Field [1]	SR Version	
	PDF417	55-190mm (6.7mil)
	EAN-13	55-460mm (13mil)
	Code 39	65-230mm (5mil)
	QR Code	40-310mm (15mil)
	Data Matrix	50-230mm (10mil)
	HD Version	
	PDF417	38-130mm (6.7mil)
	Code 39	48-70mm (3.3mil)
	Code 39	38-140mm (5mil)
	Data Matrix	53-70mm (5mil)
	Data Matrix	35-145mm (10mil)
Min. Symbol Contrast		25%
Scan Angle [2]		Roll: 360°, Pitch: ±55°, Skew: ±55°
Field of View		Horizontal 51°, Vertical 32°

Physical

Interface		RS-232, USB
Operating Voltage		5VDC±5%
Current@5VDC	Operating	258.5mA (typical), 400mA (max.)
	Idle	93.72mA
Dimensions		41.5(W)×49.5(D)×24.7(H)mm (max) (without cable)
Weight		56g
Notification		Beeper, LED indicator

Environmental

Operating Temperature	-20℃ to 60℃ (-4°F to 140°F)
Storage Temperature	-40℃ to 70℃ (-40°F to 158°F)
ESD	±14 kV (air discharge), ±8 kV (direct discharge)
Drop	1.5m
Sealing	IP54
Humidity	5% to 95% (non-condensing)
Ambient Light	0~100,000lux (natural light)

Certificates

Certificates	FCC Part 15 Class B, CE EMC Class B, RoHS 2.0, IEC62471, IEC60825

1 Depth of Field: T=23℃; Illumination=300lux using incandescent lamp; sample barcodes made by Newland.

2 Scan Angle: Scan Distance=(min. DOF + max. DOF)/2; 2D: QR Code; PCS=1; sample barcodes made by Newland.

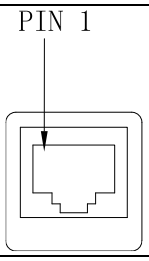
3 Operating Current: Scan Distance=(min. DOF + max. DOF)/2; test in the normal mode.

Specifications are subject to change without notice.

NLS-FM431

The following table lists the pin functions of the RJ50 port.

PIN#	Signal	I/O	Function
1	NC	NC	NC
2	IO	reserved	Used as trigger signal
3	VCC	P	5V power supply
4	RS232_TX	O	RS-232 input
5	RS232_RX	I	RS-232 output
6	RS232_CTS	I	RS level 232 clear to send
7	RS232_RTS	O	RS level 232 request to send
8	GND	P	Ground
9	USB_D-	A	USB_D- signal
10	USB_D+	A	USB_D+ signal

Interface Pinouts	

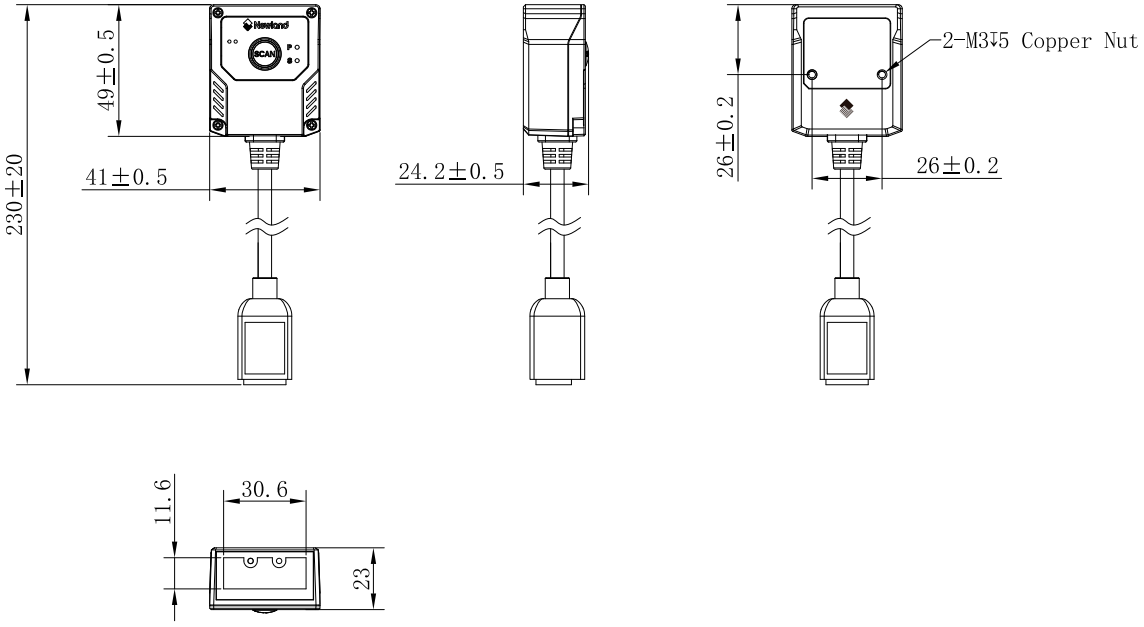
NLS-FM431

Mechanical

Mounting

Dimensions

(unit: mm)



Dimensions: 41.5(W)×49.5(D)×24.7(H)mm (max.) (without cable)

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

Newland AIDC
Scanning Made Simple