Newland AIDC
Scanning Made Simple

NLS-FM3280

FIXED MOUNT BARCODE SCANNER

FEATURES

Excellent Reading Performance

Armed with Newland's sixth-generation of **UIMG®** technology, this scanner excels at reading printed and on-screen barcodes containing large amounts of data, special for low-quality printed barcodes

IP67-rated Sealing

An IP67-rated seal renders the scanner impervious to dust, water and other contaminant.

Wide Voltage Input

Support voltage ranges from 5 ~ 24VDC

IR/Light Triggers

The combination of IR sensor and light sensor exhibits an improved sensitivity in activating the scanner to scan barcodes as they are presented, to achieve higher throughput and productivity.

Support Wiegand and RS-485 Interface

Optional Wiegand and RS-485 interfaces are provided to meet diverse customers' needs.

Optional NFC Function

The scanner supports the NFC function.

Wiegand | 1D Barcode | 2D Barcode | USB | RS232 | IP sealing | CMOS | RS485 | NFC

NLS-FM3280

Performance

Image Sensor	1280 * 1088 CMOS	Illumination	3000K white LED
Symbologies	2D	PDF417, Data Matrix, QR Code, Micro QR, Aztec, etc.	
	1D	EAN-13, EAN-8, UPC-A, UPC-E, ISSN, ISBN, Codabar, Interleaved 2 of 5, Code 128 (FNC1), Code 93, ITF-6, ITF-14, Industrial 2 of 5, Standard 2 of 5, Matrix 2 of 5, Code 11, GS1 Databar (RSS-Expand, RSS-Limited, RSS-14), MSI Plessey, Code 39 (Code 39 FULL ASCII), Plessey, etc	
	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	
Typical Depth of Field [1]	EAN-13 (13mil)	0-290mm	
	Code 39 (20mil)	15-310mm	
	Code 128(10mil)	0-280mm	
	QR Code (20mil)	0-270mm	
Scan Window		45mm×45mm	
Scan Modes		Sense mode, Continuous mode, Command mode	
Min. Symbol Contrast	1D	25%	
Scan Angle [2]		Roll: 360°, Pitch: ±60°, Skew: ±60°	
Field of View		Vertical 66°, Horizontal 58.2°	

Physical

Interface		RS-232, USB, RS-485, Wiegand	
NFC (optional) [3]	Reading Distance	0-30mm	
	Supported Functions	Support reading card number and card type, reading and writing sectors, increasing and decreasing values, reading and writing files, file operations, key operations, contactless CPU card operation (ISO14443 Type A) and APDU.	
	Supported Cards	ID card, NFC-equipped phone, Mifare Classic, Mifare Plus, Mifare Ultralight/C/EV1, Mifare Desfire, CPU card, NTAG2x series, NTAG42x series, ICODE 2, Type B card, Felica card	
Operating Voltage		5-24VDC±5%	
Current@5VDC		NFC Version	Non-NFC Version
	Operating (RMS) [4]	220mA	172mA
	Idle	175mA	118mA
Dimensions		78.7(W)×47.7(D)×67.7(H)mm (max.) (without cable)	
Weight	132g	Notification	Beeper, multi-colored LED indicator

Environmental

Operating Temperature	-20℃ to 60℃ (-4°F to 140°F)
Storage Temperature	-40℃ to 85℃ (-40°F to 185°F)
Humidity	5%~95% (non-condensing)
ESD	±15kV (air discharge) ±8kV (direct discharge)
Sealing	IP67 (not including interface)

Accessories

Cable	Optional	USB cable used to connect the scanner to a host device.
	Optional	RS-232 cable used to connect the scanner to a host device.
	Optional	RS-485 and Wiegand cables used to connect the scanner to a host device.
Power Adapter	Optional	DC5V power adapter to provide power for the scanner with RS-232 cable.

1 Test conditions: tested when illumination brightness set as level 2.

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

3 Test conditions: test with ISO/IEC 14443-3 (Type A) card.

4 Test conditions: Scan Distance= (min. DOF + max. DOF)/2, tested in the sense mode.

Specifications are subject to change without notice.

Version: V1.0

NLS-FM3280

The following table lists the pin functions of the RJ50 port (RS-232 version).

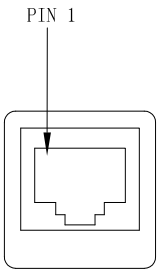
PIN#	Signal	I/O	Function
1	EXIT_DSF#	O	Good read signal output
2	EXT_TRIG#	I	Trigger signal input
3	VCC	-	Power input
4	RS232_TX	O	RS-232 transmit data
5	RS232_RX	I	RS-232 receive data
6	RS232_CTS	I	RS-232 clear to send
7	RS232_RTS	O	RS-232 request to send
8	GND	-	Ground
9	USB_D-	I/O	USB_D- signal
10	USB_D+	I/O	USB_D+ signal

The following table lists the pin functions of the RJ50 port (RS-485 and Wiegand version).

PIN#	Signal	I/O	Function
1	EXIT_DSF#	O	Good read signal output
2	EXT_TRIG#	I	Trigger signal input
3	VCC	-	Power input
4	RS485-	I/O	RS485- signal
5	RS485+	I/O	RS485+ signal
6	WG_D0	OC gate circuit output	Wiegand D0; it requires pull-up on the host.
7	WG_D1	OC gate circuit output	Wiegand D1; it requires pull-up on the host.
8	GND	-	Ground
9	USB_D-	I/O	USB_D- signal
10	USB_D+	I/O	USB_D+ signal

Interface

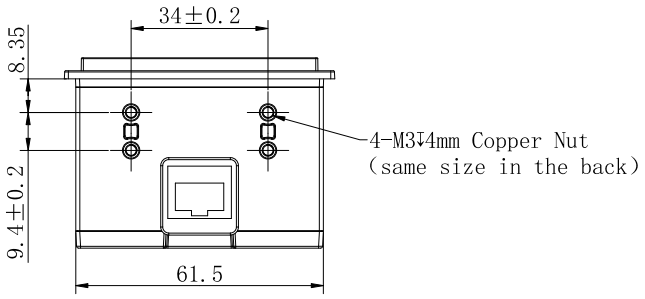
Pinouts

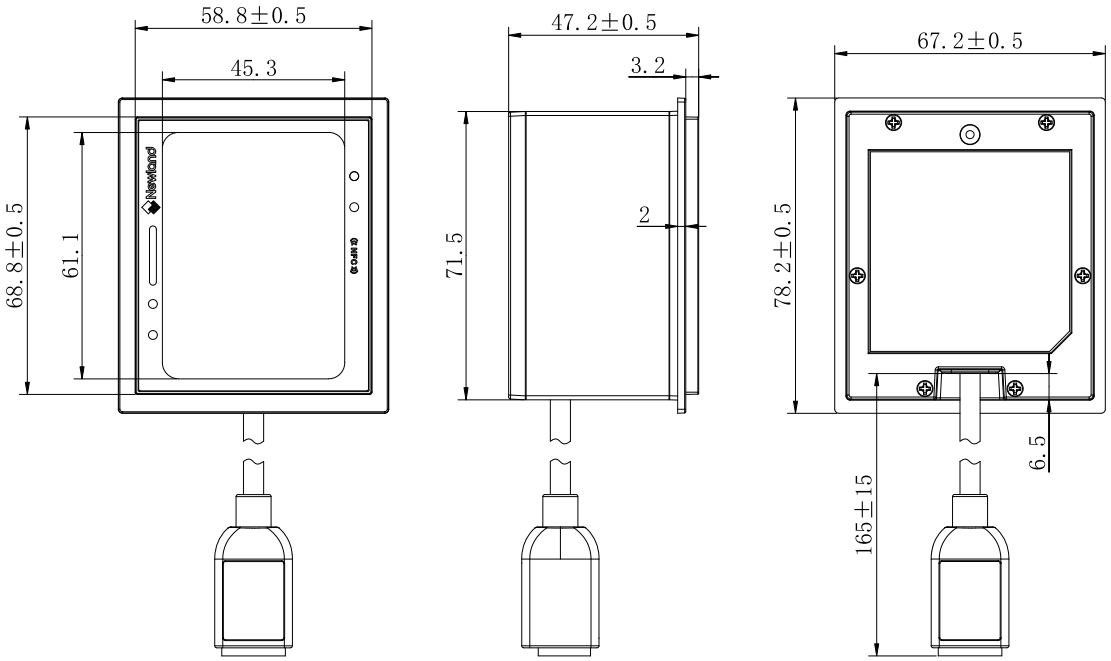


NLS-FM3280

Mechanical

Mounting Dimensions (unit: mm)





Dimensions: 78.7 (W)×47.7 (D)×67.7 (H)mm (max.) (without cable)

Specifications are subject to change without notice.

Version: V1.0

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