



NLS-FM600

FIXED MOUNT SMART SCANNER

The NLS-FM600 is a high-end fixed mount smart scanner, featuring a high-performance multi-core AI processing platform with an NPU. Delivering exceptional barcode and OCR reading capabilities, it is widely used across a variety of scanning applications.

FEATURES

○ Optimized AI Solution

The NLS-FM600 is equipped with a high-performance multi-core AI processing platform and advanced AI algorithms for parallel decoding, significantly boosting barcode reading speed and enhancing multi-code recognition capabilities.

○ Superior Scanning Performance

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).

○ Ultra-Compact Design

This miniature smart camera is easily integrated into various devices, making it perfect for space-constrained applications.

○ Multiple Interfaces

It provides RS-232, Ethernet and USB interfaces to meet different needs.

○ Advanced OCR Recognition Technology

Equipped with self-developed OCR technology, the NLS-FM600 seamlessly recognizes a wide range of English text and numbers, including dates, batch numbers, and phone numbers. It also supports simultaneous recognition of both barcodes and OCR.

○ 2.3 Megapixel CMOS

Thanks to its 2.3MP resolution CMOS sensor, the NLS-FM600 is able to capture high resolution images and decode barcode over a larger field of view.

○ Adjustable Focus

Manually adjust the focus by rotating the knob to achieve the sharpest imaging results, enabling flexible depth-of-field settings.

○ IP65-Sealed Housing

The housing is sealed to an IP65 rating, durable and secure.

○ Dual Aimers

With two green LED aimers, accurately and automatically focus on the target to take the shot.



AI



1D Barcode



OCR



Dual Green LEDs



Ethernet



IP sealing



CMOS



2D Barcode



Manual Focus



USB



RS232



IVD

NLS-FM600

Performance

Image Sensor	Resolution	1920*1200 CMOS
	Color	Mono
	Frame Rate	60fps
	Light Source	White LED*4 (default), controlled separately
Illumination	Light Source	Green LED*2
Aimer		Polarizer (default)/High transmittance (optional)
Lens Cover		Manual focus
Focus		
Symbologies	1D	Code 11, Code 128, Code 39, GS1 128 (UCC/EAN-128), AMI 128, Codabar, ISBT 128, Code 93, UPCA, UPCE, Coupon, GS1 Composite, EAN13, EAN8, ISSN, ISBN, Interleaved 2/5, Matrix 2/5, ITF14, ITF6, Industrial 2/5, Standard 2/5, China Post 25, MSI Plessey, Plessey, GS1 Databar (RSS), Code 49, Code 16K, Pharmacode, etc.
	2D	PDF417, QR Code, Data Matrix, Chinese Sensible Code, Micro PDF417, GM Code, Micro QR, Code One, etc.
	Postal	USPS Postnet, USPS Intelligent Mail, Royal Mail, USPS Planet, KIX Post, Australian Postal, Japan Post
	OCR	Supports letters and numbers in common fonts.
Motion Tolerance ¹	With high transmittance cover	1.5m/s
	With polarizer cover	0.7m/s
Min. Symbol Contrast		25%
Scan Angle ²		Roll: 360°, Pitch: ±60°, Skew: ±60°

Electrical

Operating Voltage		24VDC±10%
Current@24VDC ³	Operating	466mA RMS (typical) 973mA (max.)
	Idle	87mA
Interface		Ethernet, RS-232, USB
Notification		LED*4 (STATUS, OK/NG, TRAIN, NET), Beeper
Button		Key*2 (TUNE, TRIG)
Communication protocol	Ethernet	TCP/IP, SFTP, FTP
	USB	USB CDC, HID Keyboard, HID POS, IBM SurePOS (Table-Top)
I/O	Input	Voltage: 9-24VDC, with 2-channel optocoupler isolation
	Output	Maximum voltage: 36VDC, maximum load current: 50mA, with 2-channel optocoupler isolation

Physical

Housing	Aluminum
Dimensions(L×W×H)	37×55.5×42.5mm (max.) (without cable)
Weight	325g

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NLS-FM600

Environmental

Operating Temperature ^a	-10°C to 45°C (14°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	5% to 95% (non-condensing)
Static Discharge	±14 kV (Air discharge), ±8 kV (Contact discharge)
Drop (packaging included)	1.5m drops to concrete (for six sides, one drop per side)
Sealing	IP65
Ambient Light	0-100000lux

Accessories

Accessories	Adapter	Input 100-240V, output DC 24V/1.5A
	Lens Cover	Polarizer cover, High transmittance cover
	Bracket	L-shaped bracket

Certification

Certification	FCC Part 15 Class B, CE EMC Class B, RoHS 2.0, IEC62471
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1. Motion Tolerance: Barcode Interval=20cm; Triggered by external input signal; Code128, 20 Bytes, Resolution=10mil; Scan Distance=26cm, Illumination=300-500lux
2. Scan Angle: Scan Distance=(min. DOF + max. DOF)/2; 2D: QR Code; Pcs=1; sample barcodes made by Newland
3. Current@24VDC: Scan Mode=Continuous Mode, EAN13, Resolution=13mil, Scan Distance=21.5cm, Scan Preference=Normal Mode
4. Operating Temperature: Scan Mode=Level Trigger Mode, Reading Interval= 5s

Specifications are subject to change without notice.

Version: V1.0

Newland AIDC

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