



NLS-SOLDIER300

FIXED MOUNT BARCODE SCANNER

FEATURES

New Generation of AI Processor Platform

Equipped with a high-performance dual-core processor and an integrated high-computing neural network inference engine, the NLS-Soldier 300 utilizes advanced AI algorithms to deliver superior image processing capabilities. It ensures faster and more stable decoding performance in complex and dynamic industrial environments.

Newly Upgraded Illuminating System

The upgraded lighting design significantly enhances brightness, with all models featuring a standard half-polarizer. The system offers flexible adjustment of top and bottom zone lighting. In addition to standard red lighting, optional white, blue, ultraviolet, and infrared versions are available. The illuminating system can be further equipped with accessories such as diffuser covers and full polarizers, providing a comprehensive solution to meet diverse application requirements.

Fast and Rich Configuration Method

The Nset configuration tool streamlines the setup process into three steps: focusing, auto-learning, and testing. This makes it easy for first-time users to quickly grasp the configuration. It supports multi-device grouping, configuration library, multi-code sorting, barcode verification, script programming, enabling customers to achieve a wide range of advanced functionalities.

Versatile and Robust Industrial Design

It has a built-in IP67 seal, which is suitable for various complex environments and relatively compact industrial environments. The adjustable cable interface offers flexible installation with both horizontal and vertical positioning, ensuring seamless integration into various industrial applications.



Manufacturing



NSet



2D Barcode



Ethernet



IP67



Industrial protocols

NLS-SOLDIER300

Performance

Main unit	Model	NLS-Soldier300W		NLS-Soldier300N	NLS-Soldier300S
	Type	Wide-field type		Standard type	Long-distance type
Optical	Sensor	CMOS image sensor			
	Number of Pixels	1920 × 1200 pixels			
	Focus	Liquid lens			
	Illumination (standard)	14 High-intensity red LEDs			
	Illumination (optional)	White LED/blue LED/ultraviolet LED/infrared LED			
	Polarized Filter	Half polarized (standard)			
	Effective Focal Length	6mm	9mm	15mm	
Reading specifications	Aiming	2*circular laser			
	Supported 1D symbol	EAN-13, EAN-8, UPC-A, UPC-E, ISSN, ISBN, Codabar, Code128, Code93, ITF-6, ITF-14, Interleaved 2 of 5, Industrial 2 of 5, Standard 2 of 5, Matrix 2 of 5, Code 39, Code 11, MSI-Plessey, Plessey, Deutsche14, Deutsche12, etc.			
	2D	QR Code, Data Matrix, PDF417, Aztec Code, Micro QR, etc.			
	Minimum 1D Resolution	1.67mil	1mil	0.8mil	
	2D Resolution	3.33mil	2.5mil	2mil	
	Reading Distance	50 to 1000mm	50 to 1000mm	100 to 2000mm	
	Motion Tolerance	3m/s			
	Min. Symbol Contrast	≥15%			

Physical

Mechanical/	Dimensions	61 (W)×57.6 (D)×101.83 (H)	
Electrical specifications	Weight	420g	
	Prompt	Buzzer, pilot lamp	
	Power Voltage	24VDC	
	Current	Operating	333mA (max)
	@24V DC	Standby	90mA
	Input IO	Minimum ON voltage: ±5V; Maximum rated voltage: ±30V; 2 inputs.	
	Output IO	Maximum rated current: 50mA per channel; Maximum voltage (OFF state): ±30V; 2 outputs.	
	Communication Protocol	RS-232, TCP/IP, UDP, FTP, Modbus TCP, Ethernet/IP, Profinet, MELSEC/SLMP	

Environmental

Environmental	Operating Temperature	-20°C~+50°C (-4°F to 122°F)
Resistance	Storage Temperature	-40°C~+70°C (-40°F to 158°F)
	Relative Humidity	5%~95% (non-condensing)
	Static Discharge	±16 kV (air discharge), ±8 kV (contact discharge)
	Enclosure Rating	IP67

Accessories

Accessories	Cable	Ethernet cable, RS232+I/O cable
	Adapter	Input 100~240V, output DC 24V/1.5A
	Others	Fixed bracket, Diffuser (optional), Full polarized filter (optional), Magnifier (optional), Laser protective glass (optional)

Certification

Certification	CE, FCC, RoHS 2.0, IEC 60825-1, IEC 62368, IEC 62471, BIS, KC
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NLS-SOLDIER300

Reading range

NLS-Soldier300W

NLS-Soldier300N

NLS-Soldier300S

Distance and Range: mm , Density: mil

	Density	Distance	Range
1D	1.67	69	81×50
	4	184	195×121
	10	471	487×304
2D	5	128	136×84
	10	259	271×169
	20	524	542×338
	30	803	813×506
	35	939	949×592

	Density	Distance	Range
1D	1.67	110	81×51
	4	286	195×122
	10	718	487×304
2D	5	198	135×84
	10	397	271×169
	15	599	407×254
	20	798	542×338
	25	1000	673×420

	Density	Distance	Range
1D	1.67	209	81×51
	4	502	195×123
	10	1254	488×308
2D	3	209	81×51
	5	348	135×85
	10	697	271×171
	20	1394	542×342
	30	2000	778×491

Specifications are subject to change without notice.

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