



Newland AIDC
Scanning Made Simple



NLS-SOLDIER180E

FIXED MOUNT BARCODE SCANNER

FEATURES

New Generation of AI Processor Platform

Integrated with advanced AI algorithms and ISP functionality, the NLS-Soldier 180E delivers exceptional barcode reading performance in challenging industrial environments, including low-contrast, multi-code, and cluttered backgrounds, significantly enhancing decoding accuracy and stability.

Advanced Liquid Lens Autofocus Technology

With advanced liquid lens autofocus technology, the NLS-Soldier 180E enables fast and precise focus control, offering high flexibility in reading.

Rich Communication Interface

NLS-Soldier 180E integrates RS-232 and Ethernet interfaces (supporting Profinet, Ethernet/IP, and ModbusTCP), and includes two IO ports for input and output.

Fast and Rich Configuration Method

Through the NSet software, the scanner can be configured with a variety of functions, including device grouping, multi-barcode output, script editing, and more. Equipped with powerful self-learning capabilities, the device enables one-click image and scanning setup, greatly simplifying scanner configuration.

High Protection Industrial Structure Design

Featuring an IP65-rated protection and a compact design, it is suitable for complex and space-constrained industrial environments

Multiple Models for Diverse Scenarios

The Soldier 180E offer different angle options :NP and SP, both equipped with direct and polarized lighting for versatile illumination. Compatible with accessories such as magnifier, diffuser, and reflector, they are designed to meet a wide range of application needs.



Manufacturing



NSet



2D Barcode



Ethernet



IP 65



Industrial protocols



AI

NLS-SOLDIER180E

Performance

Main unit	Model	NLS-Soldier180E-V3-SP		NLS-Soldier180E-V3-NP	
	Type	Long-distance type		Standard type	
Optical	Sensor	CMOS image sensor			
	Number of Pixels	1600*1200 pixels			
	Focus	Liquid lens			
	Illumination	4 High-intensity red LEDs			
	Polarized Filter	Half polarized (standard)			
	Effective Focal Length	13.7mm		6.8mm	
	Field of View	Horizontal 15.2°; Vertical 11.3°		Horizontal 38°; Vertical 28.7°	
Reading specifications	Supported symbol	1D	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.		
		2D	QR Code, Data Matrix, PDF417, Aztec Code, Micro QR.		
	Minimum Resolution	1D	0.613mil	0.68mil	
		2D	0.8mil	1.3mil	
	Reading Distance	40 to 2000mm		40 to 1000mm	
	Motion Tolerance	2m/s			
	Min. Symbol Contrast	≥25%			

Physical

Mechanical/ Electrical specifications	Dimensions	45 (W) ×59.2 (D) ×25 (H)			
	Weight	185g			
	Prompt	Buzzer, LED			
	Power Voltage	24V±10%			
	Current @24V DC	Operating	200mA (max)		
		Standby	70mA		
	Input	Minimum ON voltage: ±5V; Maximum rated voltage: ±30V; 2 inputs.			
	Output	Maximum rated current: 50mA per channel; Maximum voltage (OFF state): ±30V; 2 outputs.			
	Communication Interface	RS-232, TCP/IP, UDP, FTP, Modbus TCP, Ethernet/IP, Profinet, MELSEC/SLMP			

Environmental

Environmental Resistance	Working Temperature	-20°C to 50°C		
	storage Temperature	-40°C to 70°C		
	Relative Humidity	5%-95% (non-condensing)		
	Static Discharge	±16 kV (air discharge), ±8 kV (contact discharge)		
	Enclosure Rating	IP65		

Accessories

Accessories	Cable	Ethernet cable, RS232 + I/O cable		
	Adapter	Input 100-240V, output DC 24V/1.5A		
	Others	Fixed bracket, Diffuser (optional), Reflector (optional), Magnifier (optional)		

Certification

Certification	CE, RoHS 2.0, IEC 60825-1, IEC 62368, IEC 62471, BIS, KC			
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NLS-SOLDIER180E

Reading range

Distance and Range: mm , Density: mil

NLS-Soldier180E-V3-SP			
	Density	Distance	Range
1D	0.613 mil	93	25×18
	4 mil	609	163×120
	10 mil	1523	406×301
2D	0.8 mil	68	18×13
	5 mil	423	113×84
	8 mil	677	181×134
	15 mil	1269	339×251

NLS-Soldier180E-V3-NP			
	Density	Distance	Range
1D	0.68 mil	40	28×20
	4 mil	236	163×121
	10 mil	590	406×302
2D	1.3 mil	43	30×22
	5 mil	164	113×84
	10 mil	328	226×168
	15 mil	492	339×252

Specifications are subject to change without notice.

Version: V3.0 2026/03/06

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