

# AD-IR101

## Fixed Industrial Barcode Reader



### Features

- Use self-developed AI Engine, supporting scalable vision sensor applications
- IP65-rated protection with advanced thermal management for stable operation
- Slim design with 270° rotatable cable outlet (patented) for flexible installation
- Ruggedized aviation connectors with comprehensive IO interface suite
- Dual-targeting alignment mechanism provides visual guidance, reducing installation & calibration complexity
- Supports multiple communication protocols, including TCP Client/Server, Profinet, Ethernet /IP, Modbus TCP, Serial, etc
- VSCAN host software enables visual configuration, AI auto-tuning, and custom ROI decoding

## AD-IR101 Specifications

### Physical Characteristics

Dimensions	Height × Width × Depth: 46 mm × 40 mm × 25 mm		
Weight	90 g		
Cable	Straight 3.0 m		
Case Material	Zine Alloy		
Scan Window Material	Tempered glass		
Interfaces	Rs-232, USB keyboard, USB Virtual com, Ethernet(optional)		
Indicator	Beeper, Power indicator (PWR), network indicator (LNK), and status indicator (STS)		
Programming Method	Flash Utility		
Client Software	VSCAN		
Input Voltage	12 - 24 VDC		
Current	400 mA @24VDC		
Digital I/O	17 – pin M12 connector, provides power and I/O (including Two-Way I/O × 4)		
Communication Protocol	TCP Client, TCP Server, Profinet, Ethernet / IP, ModBus TCP, Serial		
Image Size	1280 ×1024 pixels		
Light Source	Illumination: White/ red LED (optional) Aiming: green LED		
Motion Tolerance	4m/s (157 inches/second)		
Field of View	Horizontal: 40°, Vertical:34°		
Scan Angles	± 70°, ± 75° , 360° (Skew Pitch, Roll)		
Print Contrast	20% Minimum reflectance difference		
Decode Capabilities	All Common 1D/2D Barcode		
Minimum Resolution	1D: 3 Mil		
Decoding depth		SR	HD
	3mil Code 39 (3 chars)	/	35 – 90 mm
	5mil Code 128 (12 chars)	50 – 180 mm	25 – 140 mm
	13mil UPC (6 chars)	25 – 460 mm	15 – 300 mm
	20mil Code 39 (3 chars)	40 – 600 mm	40 – 470 mm
	10mil DM (20 chars)	20 – 210 mm	5 – 190 mm
	20mil QR (150 chars)	40 – 380 mm	40 – 280 mm
Temperature	Operating: 0° C to 55°C (32° to 122°F); Storage: -30°to 70°C (-22° to 158°F)		
Humidity	5% to 95% (non-condensing)		
Safety	EMC: EN55032; EN55035 Electrical Safety: En62368-1 Photobiological Safety: EN62471:2008 Illumination: 0-100,000 lux Sealing: IP65		