

MV-ID2018L-10S

1.3 MP Industrial Code Reader



RoHS



Introduction

MV-ID2018L-10S industrial code reader can read different types of 1D and 2D codes, and its max.

reading speed reaches 30 codes/sec. It adopts deep learning algorithm to process images with good robustness, and can recognize various codes.

Applicable Industry

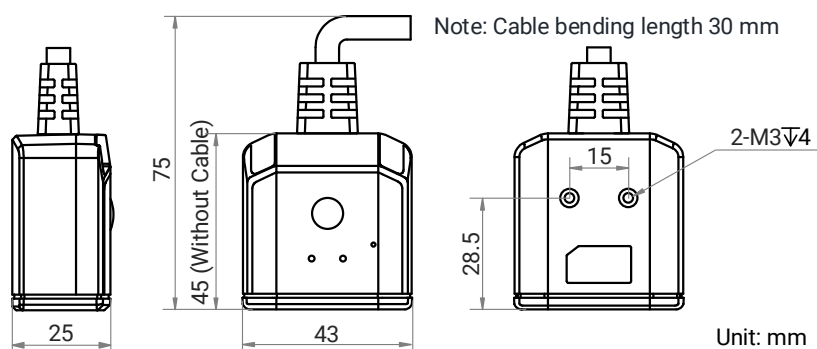
Manual or semi-automated workstation in low-speed and static scenarios, etc.

Key Feature

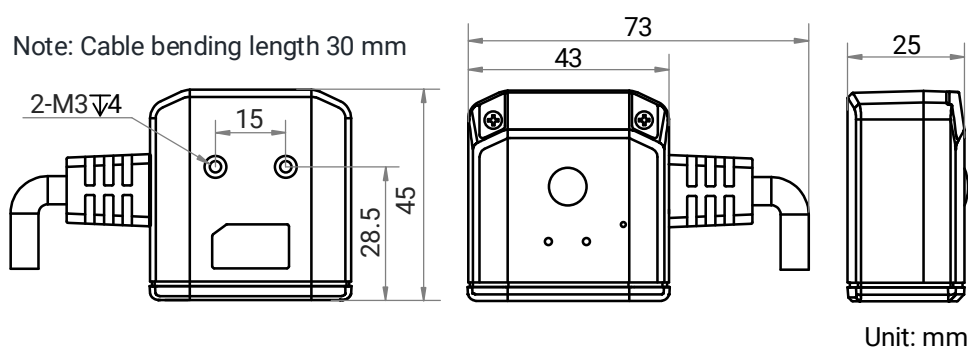
- Built-in deep learning algorithm to read codes with good robustness.
- Compact design and small in size.
- Adopts multiple IO interfaces and plug-in power interface.
- Adopts LED aiming light to help aim codes.
- Adopts buzzer and indicator for indicating device status.
- Supports one-click parameter adjustment for convenient operation.

Dimension

Cable on the bottom



Cable on the side Note: Cable bending length 30 mm



Specification

Model	MV-ID2018L-10S	
Performance		
Symbologies	1D codes: Code 39, Code 93, Code 128, ITF 14, ITF 25, CodaBar, EAN, UPCA, UPCE	
	2D codes: QR Code, Data Matrix	
Max. frame rate	50 fps	
Max. reading speed	30 codes/sec	
Sensor type	CMOS, global shutter	
Pixel size	2.7 μm × 2.7 μm	
Sensor size	1/4"	
Resolution	1280 × 1024	
Exposure time	60 μs to 0.6 sec	
Gain	1 dB to 28 dB	
Mono/color	Mono	
Communication protocol	SmartSDK, TCP Client, Serial, FTP, TCP Server, UDP, Profinet, Ethernet/IP	
Depth of field*	Code 39 (5 mil): 40 mm to 120 mm Code 128 (10 mil): 15 mm to 250 mm EAN 13 (13 mil): 30 mm to 280 mm QR Code (10 mil): 35 mm to 155 mm QR Code (15 mil): 15 mm to 215 mm QR Code (20 mil): 15 mm to 270 mm	
Electrical feature		
Data interface	Fast Ethernet (100 Mbit/s), RS-232, DC terminal	
Digital I/O	DB15 connector provides power and I/O, including non-isolated input × 2 (Line 0/1), non-isolated output × 2 (Line 2/3), RS-232 × 1. Supports device triggering via pressing button on side.	
Power supply	12 VDC to 24 VDC	
Max. power consumption	2.5 W @ 12 VDC	
Mechanical		
Focal length	2.45 mm	
Lens mount	M5.4-mount	
Ambient illumination	0 lux to 10000 lux	
Light source	Red	
Aiming system	Green LED	
Indicator	Power indicator (POWER), status indicator (OK/NG)	
Dimension	45 mm × 43 mm × 25 mm (1.8" × 1.7" × 1.0")	
Weight	Approx. 68.5 g (0.2 lb.)	
Ingress protection	IP54	
Temperature	Working temperature: 0 °C to 50 °C (32 °F to 122 °F) Storage temperature: −30 °C to 70 °C (−22 °F to 158 °F)	
Humidity	20% RH to 95% RH (no condensation)	
General		
Client software	IDMVS	
Certification	CE, RoHS, KC	

*Test condition: Environment temperature=25 $^{\circ}\text{C}$ (77 $^{\circ}\text{F}$), ambient illumination=250 lux filament lamp, sample symbologies are used.

Available Model

- 4.7 mm focal length, standard distance, white light, network interface: MV-ID2018L-10S

Detection Range

Focal Length (mm)	Working Distance (mm)	Field of View		1D Min. Resolution (mm)*	2D Min. Resolution (mm)Δ
		H (mm)	V (mm)		
2.45	120	163	130	0.12	0.29
4.7	120	89	72	0.07	0.278

Note

- 1D Min. Resolution (mm)*: $\text{Field of view (long side)} / \text{resolution (long side)} \times \text{number of pixels in the minimum bar width (number of pixels in the minimum bar width = 1)}$
- 2D Min. Resolution (mm)Δ: $\text{Field of view (long side)} / \text{resolution (long side)} \times \text{number of pixels in the side length of minimum module unit (number of pixels in the side length of minimum module unit = 3)}$
- The integrated cable of the device is a static cable by default that cannot be used in moving scene, such as drag chain. Therefore, it is recommended to fix the cable during installation.