

MV-ID813M-05S

1.3 MP Industrial Code Reader



Introduction

MV-ID813M-05S industrial code reader adopts code reading algorithm and has good decoding capability for codes with spots, defects and low contrast ratio, and clear DPM code. It can read different types of 1D codes and 2D codes in the scenario of light industry, enterprise, retail, etc., and output results rapidly. The device's max. reading speed reaches 30 codes/sec.

Applicable Industry

Intelligent manufacturing, retail, logistics, medical treatment, enterprise and public institutions, etc.

Available Model

- Standard distance, non-polarized device with USB interface: MV-ID813M-05S-WBN-SR-U
- Standard distance, polarized device with USB interface: MV-ID813M-05S-WBP-SR-U
- Standard distance, non-polarized device with serial port: MV-ID813M-05S-WBN-SR-R
- Standard distance, polarized device with serial port: MV-ID813M-05S-WBP-SR-R
- Near distance, non-polarized device with USB interface: MV-ID813M-05S-WBN-NR-U
- Near distance, polarized device with USB interface: MV-ID813M-05S-WBP-NR-U
- Near distance, non-polarized device with serial port: MV-ID813M-05S-WBN-NR-R
- Near distance, polarized device with serial port: MV-ID813M-05S-WBP-NR-R

Key Features

- Compact design and small in size.
- Adopts code reading algorithm to read different types of 1D codes and 2D codes.
- Provides good robustness to read codes with spots, defects and low contrast ratio.
- Adopts laser-aiming light to help aim codes.
- Adopts buzzer and status indicator for prompting the device's operation status.
- Supports multiple output modes of USB-HID, USB-CDC, RS-232, etc.

Specification

Model	MV-ID813M-05S-WBN(P)-SR-U	MV-ID813M-05S-WBN(P)-SR-R
Performance		
Symbologies	1D codes: Code 39, Code 93, Code 128 (GS1-128 included), CodaBar, EAN 8, EAN 13, ITF 14, ITF 25, UPCA, and UPCE	
	2D codes: QR Code (GS1-QR included), Data Matrix (GS1-DM included), Micro QR, AZTEC, and Han Xin	
	Stacked codes: PDF 417	
Min. accuracy	1D codes: 3 mil	
	2D codes: 10 mil	
Max. frame rate	60 fps	
Max. reading speed	20 codes/sec	
Pixel size	2.7 μm × 2.7 μm	
Sensor size	1/4"	
Resolution	1280 × 1024	
Depth of field	Code 39 (5 mil): 75 mm to 250 mm Code 128 (3 mil): 80 mm to 150 mm Code 128 (10 mil): 65 mm to 420 mm QR Code (10 mil): 75 mil to 230 mm QR Code (20 mil): 65 mil to 480 mm	
Exposure time	60 μs to 7000 μs	
Gain	1 dB to 15 dB	
Mono/color	Mono	
Communication protocol	SmartSDK, USB, Serial	
Laser		
Laser safety class	Laser 2	
Wavelength	650 nm	
Beam divergence angle	14.5° × 14.5°	
Repetitive frequency	Solid	
Maximum power	3.8 mW	
Electrical feature		
Data interface	USB2.0	RS-232
Digital I/O	Non-isolated input (LineIn 1) × 1, non-isolated output (LineOut 3) × 1, and configurable input/output (Line 2) × 1 Supports triggering via press top button	Non-isolated input (LineIn 1) × 1, non-isolated output (LineOut 3) × 1, configurable input/output (Line 2) × 1, and RS-232 × 1 Supports triggering via press top button
Power supply	5 VDC	12 VDC to 24 VDC
Max. power consumption	Approx. 2.5 W @ 5 VDC	Approx. 2.5 W @ 12 VDC

Specification

Mechanical	
Focal length	4.9 mm
Lens mount	M10-mount
Lens cap	Transparent lens cap and polarization lens cap are optional.
Ambient illumination	0 lux to 100000 lux
Light source	Warm white light source
Aiming system	Cross laser aiming
Status prompt	LED indicator, buzzer
Dimension	38 mm × 38 mm × 19 mm (1.5" × 1.5" × 0.7")
Weight	Approx. 40 g (0.1 lb.) (without cable)
Ingress protection	IP54
Temperature	Working temperature: -20 °C to 50 °C (-4 °F to 122 °F) Storage temperature: -40 °C to 70 °C (-40 °F to 158 °F)
Humidity	5% RH to 95% RH (no condensation)
General	
Client software	IDMVS
Certification	CE, RoHS, KC

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	2D codes: QR Code (GS1-QR included), Data Matrix (GS1-DM included), Micro QR, AZTEC, and Han Xin	
	Stacked codes: PDF 417	
Min. accuracy	1D codes: 2 mil	
	2D codes: 5 mil	
Max. frame rate	60 fps	
Max. reading speed	20 codes/sec	
Pixel size	2.7 μm × 2.7 μm	
Sensor size	1/4"	
Resolution	1280 × 1024	
Depth of field	Code 39 (5 mil): 45 mm to 160 mm Code 128 (3 mil): 50 mm to 130 mm Code 128 (10 mil): 50 mm to 235 mm Data Matrix (5 mil): 55 mm to 100 mm QR Code (10 mil): 45 mil to 165 mm QR Code (20 mil): 45 mil to 225 mm	
Exposure time	60 μs to 7000 μs	
Gain	1 dB to 15 dB	
Mono/color	Mono	
Communication protocol	SmartSDK, USB, Serial	

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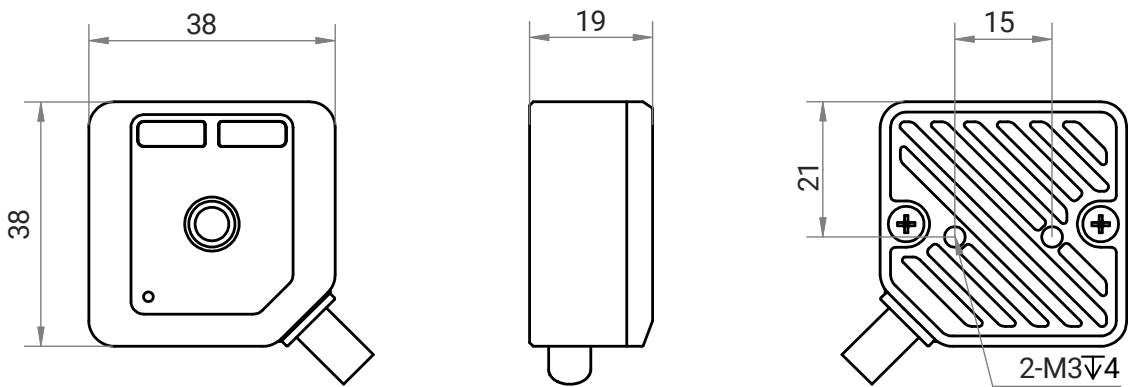
Detection Range

Device Model	Working Distance (mm)	Field of View		1D Min. Resolution (mm)*	2D Min. Resolution (mm)**
		H (mm)	V (mm)		
Standard Distance (SR)	120	84.81	71.5	0.066	0.199
Near Distance (NR)	70	49.47	41.74	0.038	0.116
1D Min. Resolution (mm)*: Field of view (long side) / resolution (long side) × 1					
2D Min. Resolution (mm)**: Field of view (long side) / resolution (long side) × 3					

Note

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.

Dimension



Note: Cable bending length 30 mm

Unit: mm