

MV-IDH7000P

Wired Handheld Code Reader



Introduction

MV-IDH7000P wired handheld code reader decodes different types of 1D and 2D codes rapidly. With the built-in intelligent code reading algorithm, it can easily decoding codes with spots, defects and low contrast ratio, and entry level DPM codes. It adopts illumination system to provide direct lighting and diffused reflection lighting.

Key Feature

- Built-in code reading algorithm for decoding different types of 1D and 2D codes.
- Provides good robustness to read codes with spots, defects and low contrast ratio.
- Supports continuous code reading, batch code reading for improving code reading efficiency.
- Adopts illumination system to provide direct lighting and diffused reflection lighting.
- Easy to replace components.
- IP65 and drop height of 2.0 m.

Available Model

- Standard distance, with network interface: MV-IDH7000P/10SR/07RN/L
- Standard distance, with USB interface: MV-IDH7000P/10SR/07RN/U
- Standard distance, with network interface and PoE: MV-IDH7000P/10SR/07RN/LP
- Near distance, with network interface: MV-IDH7000P/10NR/07RN/L
- Near distance, with USB interface: MV-IDH7000P/10NR/07RN/U
- Near distance, with network interface and PoE: MV-IDH7000P/10NR/07RN/LP
- Far distance, with USB interface: MV-IDH7000P/10ER/07RN/U
- HHD, with network interface: MV-IDH7000P/10HHD/07RN/L
- HHD, with USB interface: MV-IDH7000P/10HHD/07RN/U

Applicable Industry

PCB, new energy, consumer electronics, semiconductor, automobile parts, etc.

Specification

Model	MV-IDH7000P/10NR/07RN/L (U)	MV-IDH7000P/10SR/07RN/L (U)
Performance		
Symbologies	1D codes: Code 39, Code 93, Code 128, GS1-Code128, CodaBar, EAN 8, EAN 13, ISBN, ISSN, ITF 25, ITF 14, UPCA, UPCE	
	2D codes: QR Code, Data Matrix, MicroQR, Aztec	
	Stacked code: PDF417	
Min. accuracy	3 mil	
Sensor type	CMOS	
Resolution	1280 × 800	
Depth of field*	Code 39 (3 mil): 15 mm to 60 mm Code 39 (5 mil): 5 mm to 80 mm Data Matrix (5 mil): 10 mm to 70 mm Data Matrix (10 mil): 0 mm to 110 mm ¹ QR Code (5 mil): 10 mm to 70 mm	Code 39 (5 mil): 30 mm to 200 mm Code 128 (3 mil): 55 mm to 110 mm Code 128 (20 mil): 56 mm to 660 mm Data Matrix (10 mil): 20 mm to 220 mm QR Code (10 mil): 20 mm to 220 mm QR Code (20 mil): 10 mm to 450 mm
Field of view	Horizontal 31°, vertical 20°	
Detection angle	Tilt angle ± 60°, skew angle ± 60°, rotation angle 360°	
Symbol contrast	20%	
Communication protocol	Network interface: SmartSDK, TCP Client, TCP Server, FTP, Profinet, Ethernet/IP, Modbus, UDP, Serial USB interface: SmartSDK, USB (HID/CDC)	
Electrical feature		
Data interface	Network interface: Fast Ethernet (100 Mbit/s), RS-232, DC terminal USB interface: USB 2.0, DC terminal	
Power supply	Network interface: 12 VDC to 24 VDC USB interface: 5 VDC (USB 2.0), 12 VDC to 24 VDC (DC terminal)	
Current consumption	USB 2.0: 0.9 A (max.), 0.5 A (typical) DC terminal: 0.5 A (max.), 0.28 A (typical)	
Mechanical		
Focal length	6.7 mm	
Ambient illumination	0 lux to 100000 lux	
Light source	Direct lighting: white LED Diffused reflection lighting: red LED	
Aiming system	Cross laser aiming	
Dimension	73.4 mm × 104 mm × 229.5 mm (2.9" × 4.1" × 9.0")	
Weight	Approx. 460 g (1.0 lb.)	
Ingress protection	IP65	
Temperature	Working temperature: −10 °C to 50 °C (14 °F to 122 °F) Storage temperature: −20 °C to 60 °C (−4 °F to 140 °F)	
Humidity	20% RH to 95% RH (no condensation)	
Drop height	2.0 m	
General		
Client software	IDMVS	
Certification	CE, KC	

*Test condition: Environment temperature=25 °C (77 °F), ambient illumination=250 lux filament lamp, Hikrobot's test symbologies are used.

1: 0 mm means that the codes can be read within the imaging field of view.

Specification

Model	MV-IDH7000P/10NR/07RN/LP	MV-IDH7000P/10SR/07RN/LP
Performance		
Symbologies	1D codes: Code 39, Code 93, Code 128, GS1-Code128, CodaBar, EAN 8, EAN 13, ISBN, ISSN, ITF 25, ITF 14, UPCA, UPCE	
	2D codes: QR Code, Data Matrix, MicroQR, Aztec	
	Stacked code: PDF417	
Min. accuracy	3 mil	
Sensor type	CMOS	
Resolution	1280 × 800	
Depth of field*	Code 39 (3 mil): 15 mm to 60 mm Code 39 (5 mil): 5 mm to 80 mm Data Matrix (5 mil): 10 mm to 70 mm Data Matrix (10 mil): 0 mm to 110 mm ¹ QR Code (5 mil): 10 mm to 70 mm	Code 39 (5 mil): 30 mm to 200 mm Code 128 (3 mil): 55 mm to 110 mm Code 128 (20 mil): 56 mm to 660 mm Data Matrix (10 mil): 20 mm to 220 mm QR Code (10 mil): 20 mm to 220 mm QR Code (20 mil): 10 mm to 450 mm
Field of view	Horizontal 31°, vertical 20°	
Detection angle	Tilt angle ± 60°, skew angle ± 60°, rotation angle 360°	
Symbol contrast	20%	
Communication protocol	SmartSDK, TCP Client, TCP Server, FTP, Profinet, Ethernet/IP, Modbus, UDP, Serial	
Electrical feature		
Data interface	Fast Ethernet (100 Mbit/s), RS-232, DC terminal	
Power supply	DC terminal: 12 VDC to 24 VDC PoE: 48 VDC	
Current consumption	DC terminal: 0.5 A (max.), 0.28 A (typical) PoE: 0.2 A (max.), 0.1 A (typical)	
Mechanical		
Focal length	6.7 mm	
Ambient illumination	0 lux to 100000 lux	
Light source	Direct lighting: white LED Diffused reflection lighting: red LED	
Aiming system	Cross laser aiming	
Dimension	73.4 mm × 104 mm × 229.5 mm (2.9" × 4.1" × 9.0")	
Weight	Approx. 460 g (1.0 lb.)	
Ingress protection	IP65	
Temperature	Working temperature: −10 °C to 50 °C (14 °F to 122 °F) Storage temperature: −20 °C to 60 °C (−4 °F to 140 °F)	
Humidity	20% RH to 95% RH (no condensation)	
Drop height	2.0 m	
General		
Client software	IDMVS	
Certification	CE, KC	

*Test condition: Environment temperature=25 °C (77 °F), ambient illumination=250 lux filament lamp, Hikrobot's test symbologies are used.

1: 0 mm means that the codes can be read within the imaging field of view.

Specification

Model	MV-IDH7000P/10ER/07RN/U
Performance	
Symbologies	1D codes: Code 39, Code 93, Code 128, GS1-Code128, CodaBar, EAN 8, EAN 13, ISBN, ISSN, ITF 25, ITF 14, UPCA, UPCE
	2D codes: QR Code, Data Matrix, MicroQR, Aztec
	Stacked code: PDF417
Min. accuracy	5 mil
Sensor type	CMOS
Resolution	1280 × 800
Depth of field*	Code 39 (20 mil): 80 mm to 1000 mm Code 39 (100 mil): ** to 3000 mm ¹ Code 128 (5 mil): 180 mm to 270 mm Code 128 (15 mil): 100 mm to 800 mm Data Matrix (10 mil): 160 mm to 310 mm Data Matrix (160 mil): ** to 2700 mm ¹
Field of view	Horizontal 31°, vertical 20°
Detection angle	Tilt angle ± 60°, skew angle ± 60°, rotation angle 360°
Symbol contrast	20%
Communication protocol	SmartSDK, USB (HID/CDC)
Electrical feature	
Data interface	USB 2.0, DC terminal
Power supply	5 VDC (USB 2.0), 12 VDC (DC terminal)
Current consumption	USB 2.0: 0.9 A (max.), 0.5 A (typical) DC terminal: 0.5 A (max.), 0.28 A (typical)
Mechanical	
Focal length	6.7 mm
Ambient illumination	0 lux to 100000 lux
Light source	Direct lighting: white LED Diffused reflection lighting: red LED
Aiming system	Cross laser aiming
Dimension	73.4 mm × 104 mm × 229.5 mm (2.9" × 4.1" × 9.0")
Weight	Approx. 460 g (1.0 lb.)
Ingress protection	IP65
Temperature	Working temperature: -10 °C to 50 °C (14 °F to 122 °F) Storage temperature: -20 °C to 60 °C (-4 °F to 140 °F)
Humidity	20% RH to 95% RH (no condensation)
Drop height	2.0 m
General	
Client software	IDMVS
Certification	CE, KC

*Test condition: Environment temperature=25 °C (77 °F), ambient illumination=250 lux filament lamp, Hikrobot's test symbologies are used.

1: 0 mm means that the codes can be read within the imaging field of view.

Specification

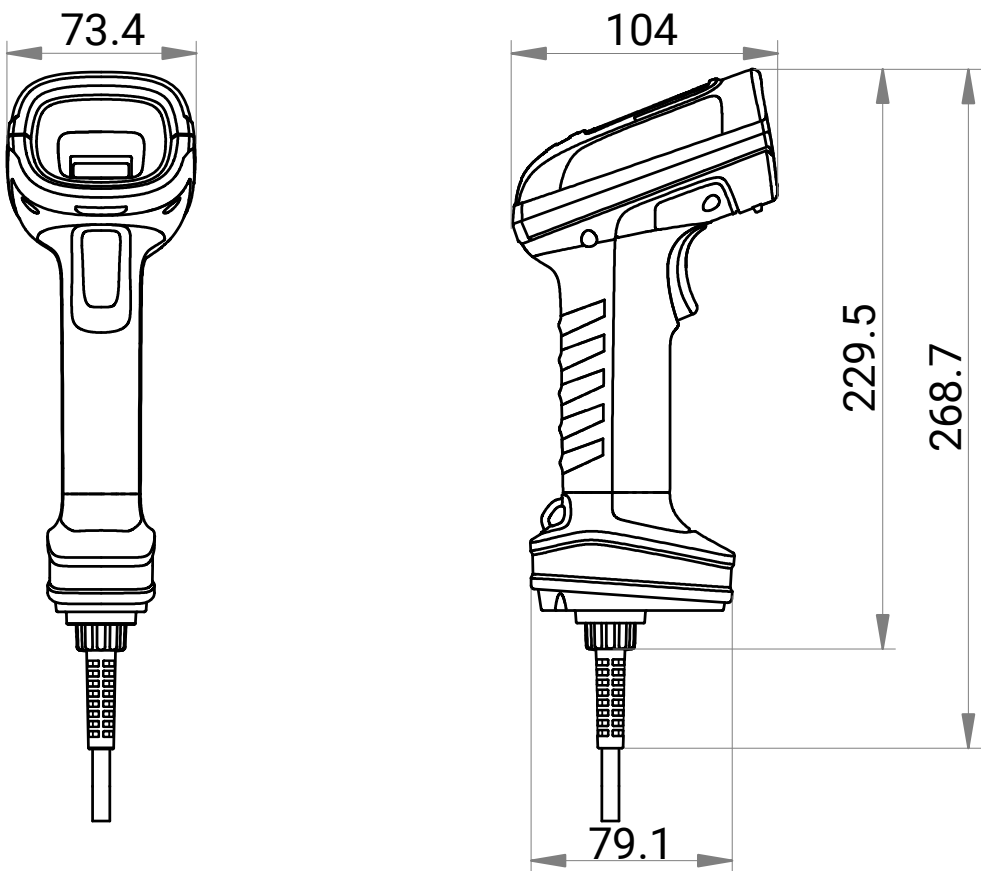
Model	MV-IDH7000P/10HHD/07RN/L	MV-IDH7000P/10HHD/07RN/U
Performance		
Symbologies	1D codes: Code 39, Code 93, Code 128, GS1-Code128, CodaBar, EAN 8, EAN 13, ISBN, ISSN, ITF 25, ITF 14, UPCA, UPCE	
	2D codes: QR Code, Data Matrix, MicroQR, Aztec	
	Stacked code: PDF417	
Min. accuracy	0.8 mil (1D codes) 2 mil (2D codes)	
Sensor type	CMOS	
Resolution	1280 × 800	
Depth of field*	Code 39 (5 mil): 0 mm to 29 mm ¹ Data Matrix (2 mil): 0 mm to 11 mm ¹ Data Matrix (5 mil): 0 mm to 20 mm ¹ QR Code (10 mil): 0 mm to 40 mm ¹	
Field of view	Horizontal 31°, vertical 20°	
Detection angle	Tilt angle ± 60°, skew angle ± 60°, rotation angle 360°	
Symbol contrast	20%	
Communication protocol	SmartSDK, TCP Client, TCP Server, FTP, Profinet, Ethernet/IP, Modbus, UDP, Serial	SmartSDK, USB (HID/CDC)
Electrical feature		
Data interface	Fast Ethernet (100 Mbit/s), RS-232, DC terminal	USB 2.0, DC terminal
Power supply	12 VDC	5 VDC (USB 2.0), 12 VDC (DC terminal)
Current consumption	0.5 A (max.), 0.28 A (typical)	USB 2.0: 0.9 A (max.), 0.5 A (typical) DC terminal: 0.5 A (max.), 0.28 A (typical)
Mechanical		
Focal length	6.7 mm	
Ambient illumination	0 lux to 100000 lux	
Light source	Direct lighting: white LED Diffused reflection lighting: red LED	
Aiming system	Cross laser aiming	
Dimension	73.4 mm × 104 mm × 229.5 mm (2.9" × 4.1" × 9.0")	
Weight	Approx. 460 g (1.0 lb.)	
Ingress protection	IP65	
Temperature	Working temperature: −10 °C to 50 °C (14 °F to 122 °F) Storage temperature: −20 °C to 60 °C (−4 °F to 140 °F)	
Humidity	20% RH to 95% RH (no condensation)	
Drop height	2.0 m	
General		
Client software	IDMVS	
Certification	CE, KC	

*Test condition: Environment temperature=25 °C (77 °F), ambient illumination=250 lux filament lamp, Hikrobot's test symbologies are used.

1: 0 mm means that the codes can be read within the imaging field of view.

Laser Information of IDH 7000P Series Product	
Laser safety class	Laser 2
Wavelength	650 nm
Pulse width	8 ms
Maximum power	1 mW

Dimension



Unit: mm