

MV-IDH7000B

Wireless Handheld Code Reader



Introduction

MV-IDH7000B wireless 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. With adaptive smart bases, the code reader can realize charging and data communication.

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.
- Adopts Bluetooth 5.0 wireless technology to provide convenient and efficient operations.
- With smart bases, parameter configuration and device management via IDMVS client software are supported.
- Adopts 3150 mAh battery to provide long battery life.
- Adopts illumination system to provide direct lighting and diffused reflection lighting.
- Supports IP65 and drop height of 2.0 m.

Available Model

- Near distance, with USB charging base set: MV-IDH7000B/10NR/07RN/US
- Near distance, with network charging base set: MV-IDH7000B/10NR/07RN/LS
- Standard distance, with USB charging base set: MV-IDH7000B/10SR/07RN/US
- Standard distance, with network charging base set: MV-IDH7000B/10SR/07RN/LS
- HHD, with USB charging base set: MV-IDH7000B/10HHD/07RN/US/PM
- HHD, with network charging base set: MV-IDH7000B/10HHD/07RN/LS/PM
- Far distance, with USB charging base set: MV-IDH7000B/10ER/07RN/US/PM
- Near distance, handheld code reader only: MV-IDH7000B/10NR/07RN
- Standard distance, handheld code reader only: MV-IDH7000B/10SR/07RN

Applicable Industry

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

Specification

Model	MV-IDH7000B/10NR/07RN/US	MV-IDH7000B/10NR/07RN/LS
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	
Field of view	Horizontal 31°, vertical 20°	
Detection angle	Tilt angle ± 60°, skew angle ± 60°, rotation angle 360°	
Symbol contrast	20%	
Wireless communication		
Communication mode	Bluetooth BT 5.0, BLE	
Wireless range	100 m (open range)	
Electrical feature		
Battery	3150 mAh	
Charging time	Shutdown mode: USB 3.0 (5 V, 1 A): 4h, 12 VDC (12 V, 2 A): 3.5 h	Shutdown mode: 12 VDC (12 V, 2 A): 3.5 h
Endurance	13 h (interval scanning, once in 2 seconds)	
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	
Prompt	LED indicator, buzzer, vibrator	
Dimension	73.4 mm × 104 mm × 215.2 mm (2.9" × 4.1" × 8.5")	
Weight	Approx. 410 g (0.9 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) Charging temperature: 0 °C to 40 °C (32 °F to 104 °F)	
Humidity	20% RH to 95% RH (no condensation)	
Drop height	2.0 m	
General		
Client software	IDMVS	
Certification	CE, KC	

Smart Base		
Model	MV-IDH7000B/SBASE/U	MV-IDH7000B/SBASE/L
Communication protocol	SmartSDK, USB (HID/CDC), Bluetooth	SmartSDK, TCP Client, FTP, TCP Server, Profinet, EthernetIP, Modbus, UDP, Serial, Bluetooth
Data interface	USB 2.0, DC terminal ²	Fast Ethernet (100 Mbit/s), RS-232, DC terminal
Power supply	USB 2.0: 5 VDC DC terminal: 12 VDC	12 VDC
Current consumption	USB 2.0: 1.5 A (max.), 0.14 A (during standby) DC terminal: 0.7 A (max.), 0.06 A (during standby)	0.7 A (max.), 0.06 A (during standby)
Charging time	Adapter: 4 h, USB: 8 h	4 h
Dimension	248.4 mm × 106.3mm × 69.4 mm (9.8" × 4.2" × 2.7")	
Weight	Approx. 380 g (0.8 lb.)	
Ingress protection	IP40	
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) Charging temperature: 0 °C to 40 °C (32 °F to 104 °F)	
Humidity	20% RH to 95% RH (no condensation)	

*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.

2: The device can be powered via USB or DC terminal. Power supply via DC terminal is recommended.

Specification

Model	MV-IDH7000B/10HHD/07RN/US/PM	MV-IDH7000B/10HHD/07RN/LS/PM
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*	Data Matrix (2 mil): 0 mm to 11 mm ¹ Data Matrix (5 mil): 0 mm to 20 mm ¹ Code 39 (5 mil): 0 mm to 29 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%	
Wireless communication		
Communication mode	Bluetooth BT 5.0, BLE	
Wireless range	100 m (open range)	

Electrical feature		
Battery	3150 mAh	
Charging time	Shutdown mode: USB 3.0 (5 V, 1 A): 4 h, 12 VDC (12 V, 2 A): 3.5 h	Shutdown mode: 12 VDC (12 V, 2 A): 3.5 h
Endurance	13 h (interval scanning, once in 2 seconds)	
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	
Prompt	LED indicator, buzzer, vibrator	
Dimension	73.4 mm × 104 mm × 215.2 mm (2.9" × 4.1" × 8.5")	
Weight	Approx. 410 g (0.9 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) Charging temperature: 0 °C to 40 °C (32 °F to 104 °F)	
Humidity	20% RH to 95% RH (no condensation)	
Drop height	2.0 m	
General		
Client software	IDMVS	
Certification	CE, KC	
Smart Base		
Model	MV-IDH7000B/SBASE/U	MV-IDH7000B/SBASE/L
Communication protocol	SmartSDK, USB (HID/CDC), Bluetooth	SmartSDK, TCP Client, FTP, TCP Server, Profinet, EthernetIP, Modbus, UDP, Serial, Bluetooth
Data interface	USB 2.0, DC terminal ²	Fast Ethernet (100 Mbit/s), RS-232, DC terminal
Power supply	USB 2.0: 5 VDC DC terminal: 12 VDC	12 VDC
Current consumption	USB 2.0: 1.5 A (max.), 0.14 A (during standby) DC terminal: 0.7 A (max.), 0.06 A (during standby)	0.7 A (max.), 0.06 A (during standby)
Charging time	Adapter: 4 h, USB: 8 h	4 h
Dimension	248.4 mm × 106.3mm × 69.4 mm (9.8" × 4.2" × 2.7")	
Weight	Approx. 380 g (0.8 lb.)	
Ingress protection	IP40	
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) Charging temperature: 0 °C to 40 °C (32 °F to 104 °F)	
Humidity	20% RH to 95% RH (no condensation)	

*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.

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Specification

Model	MV-IDH7000B/10ER/07RN/US/PM
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%
Wireless communication	
Communication mode	Bluetooth BT 5.0, BLE
Wireless range	100 m (open range)
Electrical feature	
Battery	3150 mAh
Charging time	Shutdown mode: USB 3.0 (5 V, 1 A): 4 h, 12 VDC (12 V, 2 A): 3.5 h
Endurance	13 h (interval scanning, once in 2 seconds)
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
Prompt	LED indicator, buzzer, vibrator
Dimension	73.4 mm × 104 mm × 215.2 mm (2.9" × 4.1" × 8.5")
Weight	Approx. 410 g (0.9 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) Charging temperature: 0 °C to 40 °C (32 °F to 104 °F)
Humidity	20% RH to 95% RH (no condensation)
Drop height	2.0 m
General	
Client software	IDMVS
Certification	CE, KC

Smart Base	
Model	MV-IDH7000B/SBASE/U
Communication protocol	SmartSDK, USB (HID/CDC), Bluetooth
Data interface	USB 2.0, DC terminal ²
Power supply	USB 2.0: 5 VDC DC terminal: 12 VDC
Current consumption	USB 2.0: 1.5 A (max.), 0.14 A (during standby) DC terminal: 0.7 A (max.), 0.06 A (during standby)
Charging time	Adapter: 4 h, USB: 8 h
Dimension	248.4 mm × 106.3mm × 69.4 mm (9.8" × 4.2" × 2.7")
Weight	Approx. 380 g (0.8 lb.)
Ingress protection	IP40
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) Charging temperature: 0 °C to 40 °C (32 °F to 104 °F)
Humidity	20% RH to 95% RH (no condensation)

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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 (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%	
Wireless communication		
Communication mode	Bluetooth BT 5.0, BLE	
Wireless range	100 m (open range)	
Electrical feature		
Battery	3150 mAh	

Charging time	Shutdown mode: USB 3.0 (5 V, 1 A): 4 h, 12 VDC (12 V, 2 A): 3.5 h	Shutdown mode: 12 VDC (12 V, 2 A): 3.5 h
Endurance	13 h (interval scanning, once in 2 seconds)	
Mechanical		
Focal length	6.7 mm	
Ambient illumination	0 lux to 100000 lux	
Light source	Direct lighting: white LED Diffused reflection lighting: red LED	
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Laser Information of IDH 7000B Series Product	
Laser safety class	Laser 2
Wavelength	650 nm
Pulse width	8 ms
Maximum power	1 mW

Accessories

- Smart base with USB interface: MV-IDH7000B/SBASE/U
- Smart base with network interface: MV-IDH7000B/SBASE/L

Dimension

