

MV-IDH9000B

Wireless Handheld Code Reader



Introduction

The IDH9000B series wireless handheld code reader adopts code reading algorithm to provide good decoding capability for codes with spots, defects, and low contrast ratio. It has illumination system to provide different types of lighting. The code reader also adopts OLED display for quick viewing of the device and code information, and supports smart tune, configuration code generation, and battery management. It is sturdy and durable, resistance to falling and rolling, and also resistance to harsh industrial environment with oil, dust, and water. With adaptive smart bases, the code reader can realize charging and data communication.

Available Model

- USB interface and serial port set (ultra-small code and DPM code):
MV-IDH9000B/13HHD/16RP/US
- Network interface and serial port set (ultra-small code and DPM code):
MV-IDH9000B/13HHD/16RP/LS
- USB interface and serial port set (DPM code with high performance):
MV-IDH9000B/13DP/04RP/US
- Network interface and serial port set (DPM code with high performance):
MV-IDH9000B/13DP/04RP/LS
- Handheld code reader only, ultra-small code and DPM code:
MV-IDH9000B/13HHD/16RP
- Handheld code reader only, DPM code with high performance:
MV-IDH9000B/13DP/04RP

Key Feature

- Built-in code reading algorithm and illumination system for decoding codes with spots, defects and low contrast ratio.
- The device which supports ultra-small code and DPM code recognition has a lens for reading ultra-small code with a minimum module size of 0.04 mm and a zoom lens for high-speed reading with large depth of field.
- The device which supports DPM code recognition with high performance can read challenging codes with spots, defects, low contrast ratio, or laser engraving.
- Adopts Bluetooth 5.0 wireless technology to provide stable connection with max. transmission distance of 100 meters in open areas, and supports mobile terminal connection via Bluetooth for convenient and efficient operations.
- Adopts 4650 mAh battery with long standby time.
- Supports wireless charging, preventing potential metal electrode wear and metal filing interference.
- Adopts 4 lighting modes for different scenes, such as direct lighting, polarized lighting, diffused reflection lighting, and bi-directional lighting.

Model	MV-IDH9000B/13HHD/16RP/US	MV-IDH9000B/13HHD/16RP/LS
Performance		
Symbologies	1D codes: Code 39, Code 93, Code 128, CodaBar, EAN8, EAN13, ITF25, ITF14, UPCA, UPCE	
	2D matrix codes: QR Code, Data Matrix, MicroQR, Aztec	
	Stacked barcode: PDF417	
Min. accuracy	1.57 mil	
Sensor type	CMOS	
Resolution	1280 × 1024	
Depth of field*	Code128 (3 mil): 0 mm to 100 mm Code 128 (10 mil): 0 mm to 250 mm Code 128 (20 mil): 0 mm to 350 mm Code 39 (5 mil): 0 mm to 150 mm Data Matrix (5 mil): 5 mm to 79 mm QR Code (20 mil): 0 mm to 250 mm	
Field of view	Wide-angle lens: horizontal 43.6°, vertical 35.5° Telephoto lens: horizontal 10.4°, vertical 8.3°	
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 area)	
Electrical feature		
Battery	4650 mAh	
Charging time	Shutdown mode (0% to 100%): 12 VDC (12 V, 2 A): 6 h; PoE: 6 h; Type-C: 6 h Shutdown mode (7% to 80%): 12 VDC (12 V, 2 A): 3 h; PoE: 3 h	
Endurance	14 h (interval scanning, once in 20 seconds)	
Max. current	1.5 A	
Mechanical		
Ambient illumination	0 lux to 100000 lux	
Light source	Diffused reflection lighting (red LED), bi-directional lighting (red LED), direct lighting (white LED), polarized lighting (white LED) Smart scanning mode is set by default, and auto polling of lights is supported according to the code reading scene.	
Aiming system	650 nm laser (red light) + LED (green light)	
Prompt	LED indicator, buzzer, vibrator	
Display	0.96" OLED display	
Dimension	74 mm × 109.9 mm × 227.1 mm (2.9" × 4.3" × 8.9")	
Weight	Approx. 580 g (1.3 lb.)	
Ingress protection	IP67	
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	5% RH to 95% RH (no condensation)	
Drop height	Dropping: 2.5 m, 50 times Rolling: 0.5 m, 20000 times	
Chemically resistant	ISO 16750	
Static electricity resistant	± 25 kV (air discharge), ± 10 kV (contact discharge or indirect discharge)	

General		
Client software	IDMVS	
Certification	CE, KC	
Smart Base		
Model	MV-IDH9000B/SBASE/U	MV-IDH9000B/SBASE/L
Communication protocol	SmartSDK, USB (HID/CDC), Bluetooth, Serial ¹	SmartSDK, TCP Client, FTP, TCP Server, Profinet, EthernetIP, Modbus, UDP, Serial, Bluetooth, MELSEC
Data interface	USB 2.0, DC terminal	Fast Ethernet (100 Mbit/s) ² , RS-232, DC terminal
Power supply	DC terminal: 12 VDC to 24 VDC	DC terminal: 12 VDC to 24 VDC PoE: 48 VDC
Current consumption	1.1 A (max.), 0.15 A (during standby)	DC terminal: 1.1 A (max.), 0.15 A (during standby) PoE: 0.35 A (max.), 0.1 A (during standby)
Charging time	6 h	
Dimension	257.9 mm × 99 mm × 67.6 mm (10.2" × 3.9" × 2.7")	
Weight	Approx. 380 g (0.8 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	5% RH to 95% RH (no condensation)	

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

1: If Serial communication protocol should be used for the device with USB interface, you need to purchase a cable with serial port or USB interface separately.

2: PoE power supply is supported by the device with network interface.

Specification

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Laser Information of IDH9000B Series Product

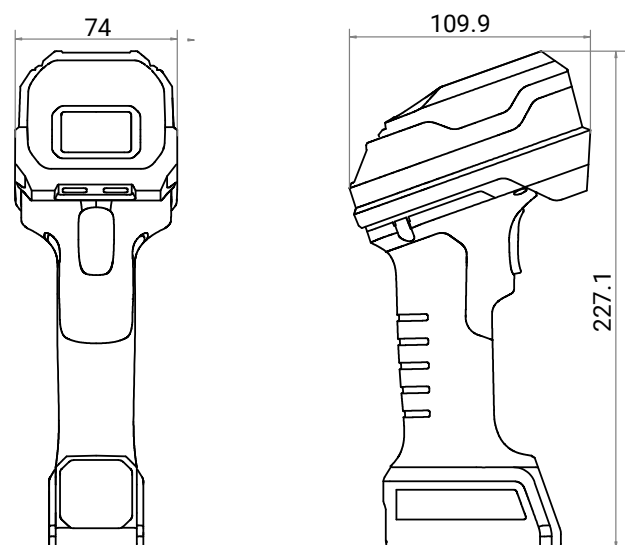
Laser safety class	Laser 2
Wavelength	650 nm
Pulse width	6.6 ms
Maximum power	1 mW

Applicable Industry

Automobile parts, consumer electronics, semiconductor, PCB, medical equipment, etc.

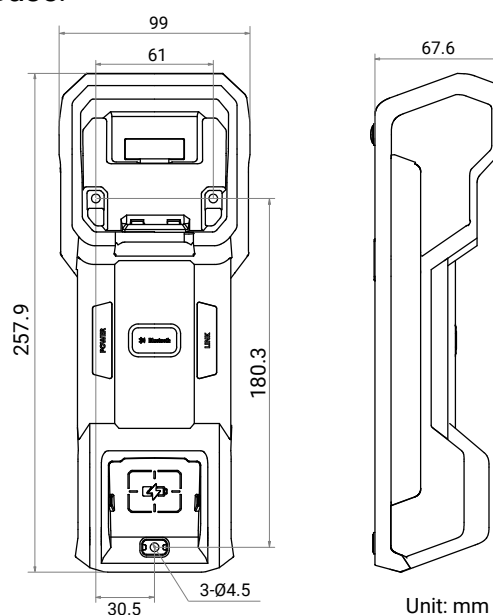
Dimension

Wireless Handheld Code Reader:



Unit: mm

Smart Base:



Unit: mm