

MV-IDH3000B

Wireless Handheld Code Reader



Introduction

MV-IDH3000B 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. With 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.
- Supports continuous code reading, batch code reading for improving code reading efficiency.
- 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.

Applicable Industry

Consumer electronics, medical treatment, appliance manufacturing, etc.

Available Model

- MV-IDH3000B/13NR/05RN/LS
- MV-IDH3000B/13NR/05RN/US
- MV-IDH3000B/13SR/05RN/LS
- MV-IDH3000B/13SR/05RN/US
- MV-IDH3000B/13SR/05WP/LS/PM
- MV-IDH3000B/13SR/05WP/US/PM

Accessories

- Code reader with near distance (without smart base)
MV-IDH3000B/13NR/05RN
- Code reader with standard distance (without smart base)
MV-IDH3000B/13SR/05RN
- Smart base with USB interface:
MV-IDH3000B/SBASE/U
- Smart base with Fast Ethernet:
MV-IDH3000B/SBASE/L

Model	MV-IDH3000B/13NR/05RN/LS	MV-IDH3000B/13SR/05RN/LS
Performance		
Symbologies	1D codes: Code 39, Code 93, Code 128, CodaBar, EAN8, EAN13, ITF25, ITF14, UPCA, UPCE 2D codes: QR Code, Data Matrix, MicroQR, AZTEC Stacked barcode: PDF417	
Min. accuracy	3 mil	4 mil
Max. frame rate	50 fps	
Sensor type	CMOS, global shutter	
Pixel size	2.7 μm \times 2.7 μm	
Sensor size	1/4"	
Resolution	1280 \times 1024	
Depth of field*	Code 128 (3 mil): 25 mm to 70 mm Code 128 (10 mil): 10 mm to 170 mm Code 39 (5 mil): 15 mm to 100 mm Data Matrix (5 mil): 30 mm to 60 mm Data Matrix (10 mil): 5 mm to 115 mm	Code 39 (5 mil): 40 mm to 160 mm Code 128 (10 mil): 10 mm to 400 mm Data Matrix (10 mil): 30 mm to 200 mm QR Code (15 mil): 15 mm to 280 mm QR Code (20 mil): 20 mm to 370 mm
Field of view	Horizontal 40°, vertical 34°	
Detection angle	Tilt angle \pm 60°, skew angle \pm 60°, rotation angle 360°	
Symbol contrast	20%	
Wireless communication		
Bluetooth	BT 5.0, 2.4 GHz to 2.4835 GHz, BLE	
Wireless range	80 m (open range)	
Communication protocol	Wireless handheld code reader: Bluetooth Smart base: SmartSDK, TCP Client, TCP Server, Serial, FTP, UDP, Bluetooth	
Electrical feature		
Data interface	Fast Ethernet (100 Mbit/s), RS-232, DC terminal	
Battery	3150 mAh, chargeable lithium battery	
Charging time	Shutdown mode: 12 VDC (12 V, 2 A): 3.5 h	
Endurance	13 h (interval scanning, once in 2 seconds)	
Power supply	Wireless handheld code reader: 3.8 VDC (battery providing power) Smart base: 12 VDC to 24 VDC	
Max. power consumption	Wireless handheld code reader: standby mode: 0.8 W @ 3.8 VDC, working mode: 1.6 W @ 3.8 VDC, sleep mode: 0.6 W @ 3.8 VDC Smart base: 6.6 W @ 12 VDC	
Mechanical		
Focal length	4.7 mm	
Lens mount	M5.8-mount	
Ambient illumination	0 lux to 100000 lux	
Light source	Red LED	
Aiming system	Cross laser aiming	
Prompt	LED indicator, buzzer, vibrator	
Dimension	Wireless handheld code reader: 74.4 mm \times 86.6 mm \times 179.5 mm (2.9" \times 3.4" \times 7.1") Smart base: 100.9 mm \times 131.8 mm \times 83.6 mm (4.0" \times 5.2" \times 3.3")	
Weight	Wireless handheld code reader: Approx. 230 g (0.5 lb.) Smart base: Approx. 180 g (0.4 lb.)	
Ingress protection	IP42	

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 80% RH (no condensation)
Drop height	1.5 m, 50 times
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.

Specification

Model	MV-IDH3000B/13NR/05RN/US	MV-IDH3000B/13SR/05RN/US
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Min. accuracy	3 mil	4 mil
Max. frame rate	50 fps	
Sensor type	CMOS, global shutter	
Pixel size	2.7 µm × 2.7 µm	
Sensor size	1/4"	
Resolution	1280 × 1024	
Depth of field*	Code 128 (3 mil): 25 mm to 70 mm Code 128 (10 mil): 10 mm to 170 mm Code 39 (5 mil): 15 mm to 100 mm Data Matrix (5 mil): 30 mm to 60 mm Data Matrix (10 mil): 5 mm to 115 mm	Code 39 (5 mil): 40 mm to 160 mm Code 128 (10 mil): 10 mm to 400 mm Data Matrix (10 mil): 30 mm to 200 mm QR Code (15 mil): 15 mm to 280 mm QR Code (20 mil): 20 mm to 370 mm
Field of view	Horizontal 40°, vertical 34°	
Detection angle	Tilt angle ± 60°, skew angle ± 60°, rotation angle 360°	
Symbol contrast	20%	
Wireless communication		
Bluetooth	BT 5.0, 2.4 GHz to 2.4835 GHz, BLE	
Wireless range	80 m (open range)	
Communication protocol	Wireless handheld code reader: Bluetooth Smart base: SmartSDK, USB (HID/CDC), Bluetooth	
Electrical feature		
Data interface	USB 2.0, DC terminal	
Battery	3150 mAh, chargeable lithium battery	
Charging time	Shutdown mode: USB 2.0 (5 V, 500 mA): 8.5 h, USB 3.0 (5 V, 1 A): 8.5 h, 12 VDC (12 V, 2 A): 3.5 h	
Endurance	13 h (interval scanning, once in 2 seconds)	
Power supply	Wireless handheld code reader: 3.8 VDC (battery providing power) Smart base: 5 VDC (USB), 12 VDC to 24 VDC (DC terminal)	
Max. power consumption	Wireless handheld code reader: standby mode: 0.8 W @ 3.8 VDC, working mode: 1.6 W @ 3.8 VDC, sleep mode: 0.6 W @ 3.8 VDC Smart base: 4.5 W @ 5 VDC (USB), 6.6 W @ 12 VDC (DC terminal)	

Mechanical	
Focal length	4.7 mm
Lens mount	M5.8-mount
Ambient illumination	0 lux to 100000 lux
Light source	Red LED
Aiming system	Cross laser aiming
Prompt	LED indicator, buzzer, vibrator
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Min. accuracy	4 mil	
Max. frame rate	50 fps	
Sensor type	CMOS, global shutter	
Pixel size	2.7 μm × 2.7 μm	
Sensor size	1/4"	
Resolution	1280 × 1024	
Depth of field*	Code 39 (5 mil): 40 mm to 160 mm Code 128 (10 mil): 10 mm to 400 mm Data Matrix (10 mil): 30 mm to 200 mm QR Code (15 mil): 15 mm to 280 mm QR Code (20 mil): 20 mm to 370 mm	
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Mechanical		
Focal length	4.7 mm	
Lens mount	M5.8-mount	
Ambient illumination	0 lux to 100000 lux	
Light source	White LED	
Aiming system	Cross laser aiming	
Prompt	LED indicator, buzzer, vibrator	
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Humidity	20% RH to 80% RH (no condensation)	
Drop height	1.5 m, 50 times	
General		
Client software	IDMVS	
Certification	CE, KC	

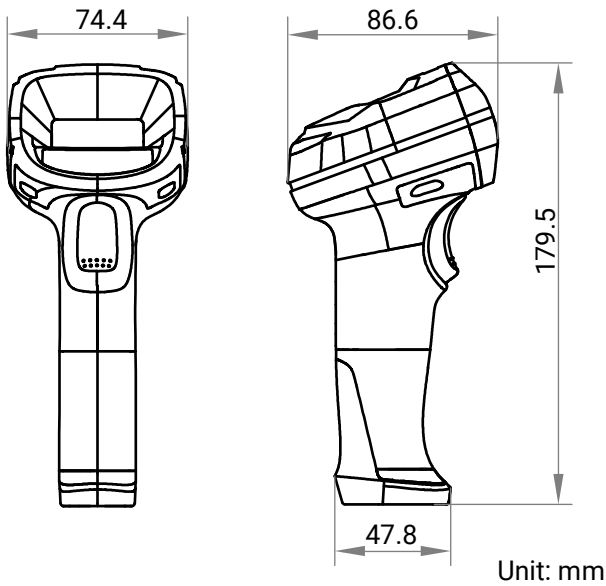
*Test condition: Environment temperature=25 °C (77 °F), ambient illumination=250 lux filament lamp, Hikrobot's test symbologies are used.

Laser Information of IDH 3000B Series Product

Laser safety class	Laser 2
Wavelength	650 nm
Beam divergence angle	14.5°
Pulse width	8 ms
Repetitive frequency	50 Hz
Maximum power	1 mW

Dimension

Wireless Handheld Code Reader:



Smart Base:

