

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/LES
- MV-IDH3000B/13NR/05RN/US
- MV-IDH3000B/13NR/04RN/US
- MV-IDH3000B/13SR/05RN/LS
- MV-IDH3000B/13SR/05RN/LES
- MV-IDH3000B/13SR/05RN/US
- MV-IDH3000B/13SR/05WN/US
- MV-IDH3000B/13SR/05WN/LS
- MV-IDH3000B/13SR/05WP/LS
- MV-IDH3000B/13SR/05WP/US
- MV-IDH3000B/13HD/07RN/US

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	MV-IDH3000B/13SR/05WN/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 × 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, 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	White LED	
Aiming system	Cross laser aiming		
Prompt	LED indicator, buzzer, vibrator		
Dimension	Wireless handheld code reader: 74.4 mm × 86.6 mm × 179.5 mm (2.9" × 3.4" × 7.1") Smart base: 100.9 mm × 131.8 mm × 83.6 mm (4.0" × 5.2" × 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: -20 °C to 50 °C (-4 °F to 122 °F), storage temperature: -30 °C to 60 °C (-22 °F to 140 °F), charging temperature: 0 °C to 45 °C (32 °F to 113 °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	MV-IDH3000B/13SR/05WN/US
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		
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Sensor size	1/4"		
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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	White LED
Aiming system	Cross laser aiming	
Prompt	LED indicator, buzzer, vibrator	
Dimension	Wireless handheld code reader: 74.4 mm × 86.6 mm × 179.5 mm (2.9" × 3.4" × 7.1") Smart base: 100.9 mm × 131.8 mm × 83.6 mm (4.0" × 5.2" × 3.3")	
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Temperature	Working temperature: -20 °C to 50 °C (-4 °F to 122 °F), storage temperature: -30 °C to 60 °C (-22 °F to 140 °F), charging temperature: 0 °C to 45 °C (32 °F to 113 °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/LES	MV-IDH3000B/13SR/05RN/LES
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 × 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, TCP Client, Serial, FTP, TCP Server, UDP, Bluetooth, Ethernet/IP, Profinet, Modbus	
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 × 86.6 mm × 179.5 mm (2.9" × 3.4" × 7.1") Smart base: 100.9 mm × 131.8 mm × 83.6 mm (4.0" × 5.2" × 3.3")
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Specification

Model	MV-IDH3000B/13SR/05WP/LS	MV-IDH3000B/13SR/05WP/US
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	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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Communication protocol	Wireless handheld code reader: Bluetooth Smart base: SmartSDK, TCP Client, Serial, FTP, TCP Server, UDP, Bluetooth	Wireless handheld code reader: Bluetooth Smart base: SmartSDK, USB (HID/CDC), Bluetooth
Electrical feature		
Data interface	Fast Ethernet (100 Mbit/s), RS-232, DC terminal	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	
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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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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 (3 mil): 0 mm to 70 mm Code 128 (10 mil): 0 mm to 150 mm Code 39 (5 mil): 0 mm to 85 mm Data Matrix (5 mil): 10 mm to 50 mm Data Matrix (10 mil): 0 mm to 100 mm	Code 39 (3 mil): 0 mm to 105 mm Code 128 (10 mil): 0 mm to 170 mm Code 39 (5 mil): 0 mm to 130 mm Data Matrix (5 mil): 8 mm to 80 mm Data Matrix (10 mil): 0 mm to 145 mm
Field of view	Horizontal 44°, vertical 36°	Horizontal 29°, vertical 23°
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		
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Mechanical		
Focal length	4.3 mm	6.7 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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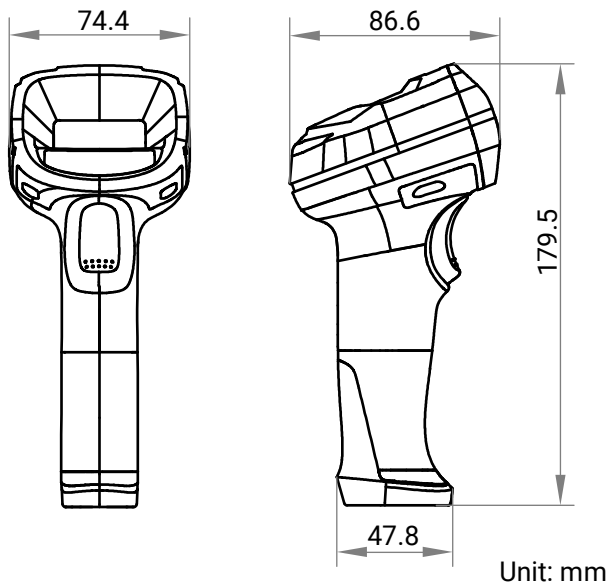
Ingress protection	IP42
Temperature	Working temperature: -20 °C to 50 °C (-4 °F to 122 °F), storage temperature: -30 °C to 60 °C (-22 °F to 140 °F), charging temperature: 0 °C to 45 °C (32 °F to 113 °F)
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General	
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Laser 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	5 mW

Dimension

Wireless Handheld Code Reader:



Smart Base:

