

MV-IDH2000RF

Wireless Handheld Code Reader



Introduction

MV-IDH2000RF 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 data cable, the code reader can realize charging function.

Key Feature

- Built-in code reading algorithm for decoding different types of 1D codes 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.
- Supports 2.4 G wireless communication with stable and reliable signal.
- Adopts 2700 mAh battery with long standby time.
- IP52 and drop height of 1.5 m.

Available Model

- 0.3 MP, standard distance, white light, 2.4 G, with USB charging base set:
MV-IDH2000RF/03SR/03WN/UC
- 1.3 MP, standard distance, white light, 2.4 G, with USB charging base set:
MV-IDH2000RF/13SR/05WN/UC
- 1.3 MP, near distance, white light, 2.4 G, with USB charging base set:
MV-IDH2000RF/13NR/05WN/UC

Applicable Industry

Intelligent manufacturing, retail, logistics, medical treatment, enterprise and public institutions, etc.

Accessories

- Code reader with standard distance (without smart base):
MV-IDH2000RF/03SR/03WN
MV-IDH2000RF/13SR/05WN
- Code reader with near distance (without smart base):
MV-IDH2000RF/13NR/05WN
- Smart base: MV-IDH2000RF/CBASE/U
- USB cable (type B): MV-IDA-PE-U2-U2-ST
- Receiver: MV-IDA-HGP-RFRC

Model	MV-IDH2000RF/03SR/03WN/UC
Performance	
Symbologies	1D codes: Code 39, Code 93, Code 128, CodaBar, EAN 8, EAN 13, ITF 25, ITF 14, UPCA, UPCE
	2D codes: QR Code, Data Matrix, MicroQR, Aztec
	Stacked codes: PDF417
Min. accuracy	4 mil
Max. frame rate	50 fps
Sensor type	CMOS, global shutter
Pixel size	3.74 μm $\times$ 3.74 μm
Sensor size	1/6"
Resolution	640 $\times$ 480
Depth of field*	EAN 13 (13 mil): 30 mm to 240 mm Code 39 (5 mil): 50 mm to 100 mm Code 128 (10 mil): 30 mm to 240 mm Data Matrix (10 mil): 40 mm to 130 mm QR Code (15 mil): 15 mm to 205 mm
Field of view	Horizontal 42°, vertical 32°
Detection angle	Tilt angle $\pm 60^\circ$, skew angle $\pm 60^\circ$, rotation angle 360°
Symbol contrast	20%
Wireless communication	
Radio frequency	2.4 G
Wireless range	80 m (open range)
Communication protocol	SmartSDK, USB, 2.4 G
Electrical feature	
Data interface	Code reader: USB 2.0 (Type B) Smart base: USB 2.0 (Type B), USB 2.0 (Type A)
Battery	2700 mAh, chargeable lithium battery
Charging time	6 h
Endurance	12 h (interval scanning, once in 2 seconds)
Power supply	5 VDC
Max. power consumption	6 W @ 5 VDC
Mechanical	
Focal length	3.1 mm
Lens mount	M5.0-mount
Ambient illumination	0 lux to 100000 lux
Light source	White LED
Aiming system	Orange LED
Prompt	LED indicator, buzzer
Dimension	Code reader: 66.5 mm $\times$ 94 mm $\times$ 169.5 mm (2.6" $\times$ 3.7" $\times$ 6.7") Smart base: 82.6 mm $\times$ 121.8 mm $\times$ 76.1 mm (3.3" $\times$ 4.8" $\times$ 3.0")
Weight	Code reader: approx. 160 g (0.4 lb.), smart base: approx. 120 g (0.3 lb.)
Ingress protection	Code reader: IP52, smart base: 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	5% RH to 95% 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-IDH2000RF/13NR/05WN/UC	MV-IDH2000RF/13SR/05WN/UC
Performance		
Symbologies	1D codes: Code 39, Code 93, Code 128, CodaBar, EAN 8, EAN 13, ITF 25, ITF 14, UPCA, UPCE	
	2D codes: QR Code, Data Matrix, MicroQR, Aztec, Han Xin	
	Stacked codes: PDF417	
Min. accuracy	1D codes: 2 mil 2D codes: 4 mil	1D codes: 3 mil 2D codes: 10 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): 30 mm to 110 mm Code 128 (10 mil): 20 mm to 205 mm Data Matrix (5 mil): 40 mm to 85 mm QR Code (10 mil): 20 mm to 140 mm QR Code (20 mil): 20 mm to 200 mm	Code 128 (3 mil): 70 mm to 160 mm Code 128 (10 mil): 30 mm to 440 mm QR Code (10 mil): 45 mm to 235 mm QR Code (15 mil): 20 mm to 360 mm QR Code (20 mil): 20 mm to 460 mm
Field of view	Horizontal 39°, vertical 29°	
Detection angle	Tilt angle ± 60°, skew angle ± 60°, rotation angle 360°	
Symbol contrast	20%	
Wireless communication		
Radio frequency	2.4 G	
Wireless range	80 m (open range)	
Communication protocol	SmartSDK, USB, 2.4 G	
Electrical feature		
Data interface	Code reader: USB 2.0 (Type B) Smart base: USB 2.0 (Type B), USB 2.0 (Type A)	
Battery	2700 mAh, chargeable lithium battery	
Charging time	6 h	
Endurance	12 h (interval scanning, once in 2 seconds)	
Power supply	5 VDC	
Max. power consumption	6 W @ 5 VDC	
Mechanical		
Focal length	4.9 mm	
Lens mount	M5.0-mount	
Ambient illumination	0 lux to 100000 lux	
Light source	White LED	

Aiming system	Cross laser aiming
Prompt	LED indicator, buzzer
Dimension	Code reader: 66.5 mm × 94 mm × 169.5 mm (2.6" × 3.7" × 6.7") Smart base: 82.6 mm × 121.8 mm × 76.1 mm (3.3" × 4.8" × 3.0")
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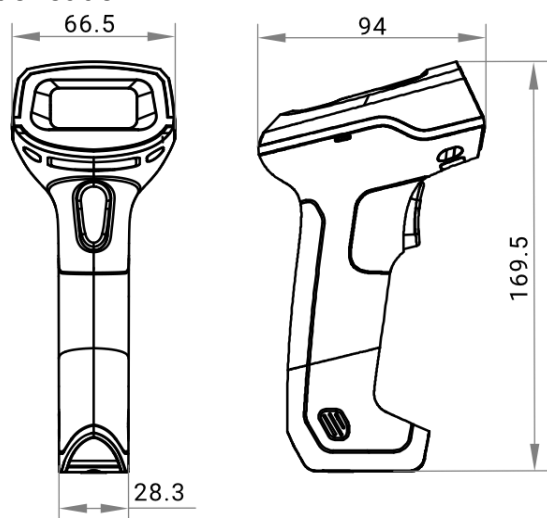
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Laser Information of IDH 2000RF Series Product

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

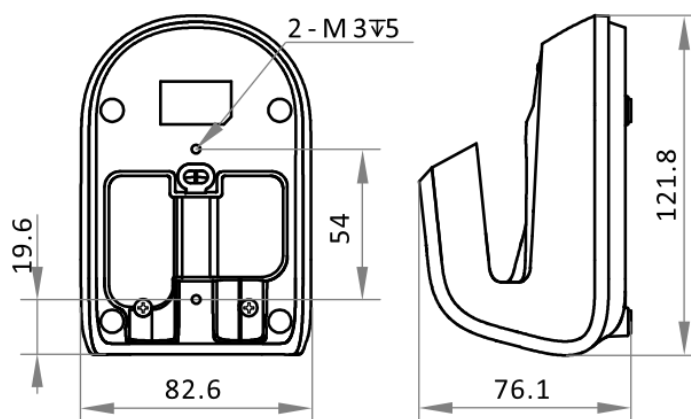
Dimension

Code reader:



Unit: mm

Smart base:



Unit: mm