

MV-IDH3000

Wired Handheld Code Reader



Introduction

MV-IDH3000 wired 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.

Key Features

- 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.
- Supports communication protocols, including TCP, FTP, UDP, USB, Serial, and SmartSDK.
- The device with industrial protocols supports Profinet, Ethernet/IP, Modbus, MC/SLMP, and FINS communication protocols.
- Easy to replace components.

Applicable Industry

Consumer electronics, medical treatment, appliance manufacturing, enterprise and public institutions, etc.

Available Model

- Near distance, red light, with network interface:
MV-IDH3000/13NR/05RN/L
- Near distance, red light, with network interface, support industrial protocols:
MV-IDH3000/13NR/05RN/LE
- Near distance, red light, with USB interface:
MV-IDH3000/13NR/05RN/U
- Standard distance, red light, with network interface:
MV-IDH3000/13SR/05RN/L
- Standard distance, red light, with network interface, support industrial protocols:
MV-IDH3000/13SR/05RN/LE
- Standard distance, red light, with USB interface:
MV-IDH3000/13SR/05RN/U
- Standard distance, white light, polarized, with network interface:
MV-IDH3000/13SR/05WP/L
- Standard distance, white light, polarized, with USB interface:
MV-IDH3000/13SR/05WP/U

Specification

Model	MV-IDH3000/13NR/05RN/L(U)	MV-IDH3000/13SR/05RN/L(U)
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 matrix codes: QR Code, Data Matrix, MicroQR, Aztec, GS1-DM, GS1-QR, Han Xin Stacked code: PDF417	
Min. accuracy	3 mil	4 mil
Sensor type	CMOS	
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%	
Communication protocol	Network interface: SmartSDK, TCP Client, FTP, TCP Server, UDP, Serial (RS-232) USB interface: SmartSDK, USB (HID/CDC), Serial (RS-232)	
Electrical feature		
Data interface	Network interface: Fast Ethernet (100 Mbit/s), RS-232, DC terminal USB interface: USB 2.0, RS-232, DC terminal	
Power supply	Network interface: 12 VDC to 24 VDC USB interface: USB 2.0: 5 VDC; DC terminal: 12 VDC to 24 VDC	
Current consumption	Network interface: 0.5 A (max.), 0.28 A (typical) USB interface: USB 2.0: 0.9 A (max.), 0.5 A (typical); DC terminal: 0.5 A (max.), 0.28 A (typical)	
Mechanical		
Focal length	4.7 mm	
Ambient illumination	0 lux to 100000 lux	
Light source	Red LED	
Aiming system	Cross laser aiming	
Prompt	LED indicator, buzzer, vibrator	
Dimension	74.4 mm × 86.6 mm × 190.2 mm (2.9" × 3.4" × 7.5")	
Weight	Approx. 160 g (0.4 lb.)	
Ingress protection	IP52	
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	20% RH to 80% RH (no condensation)	
Drop height	Dropping: 1.8 m, 50 times Rolling: 0.5 m, 1200 times	
Static electricity resistant	± 16 kV (air discharge), ± 8 kV (contact discharge)	
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-IDH3000/13NR/05RN/LE	MV-IDH3000/13SR/05RN/LE
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 matrix codes: QR Code, Data Matrix, MicroQR, Aztec, GS1-DM, GS1-QR, Han Xin Stacked code: PDF417	
Min. accuracy	3 mil	4 mil
Sensor type	CMOS	
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%	
Communication protocol	SmartSDK, TCP Client, FTP, TCP Server, Profinet, Ethernet/IP, Modbus, UDP, Serial, MC/SLMP, FINS ¹	
Electrical feature		
Data interface	Fast Ethernet (100 Mbit/s), RS-232, DC terminal	
Power supply	12 VDC to 24 VDC	
Current consumption	0.5 A (max.), 0.28 A (typical)	
Mechanical		
Focal length	4.7 mm	
Ambient illumination	0 lux to 100000 lux	
Light source	Red LED	
Aiming system	Cross laser aiming	
Prompt	LED indicator, buzzer, vibrator	
Dimension	74.4 mm × 86.6 mm × 190.2 mm (2.9" × 3.4" × 7.5")	
Weight	Approx. 160 g (0.4 lb.)	
Ingress protection	IP52	
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	20% RH to 80% RH (no condensation)	
Drop height	Dropping: 1.8 m, 50 times Rolling: 0.5 m, 1200 times	
Static electricity resistant	± 16 kV (air discharge), ± 8 kV (contact discharge)	
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.

1: Communication protocols including Profinet, Ethernet/IP, Modbus, MC/SLMP, and FINS are available for the device which supports industrial protocols.

Specification

Model	MV-IDH3000/13SR/05WP/L	MV-IDH3000/13SR/05WP/U
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 matrix codes: QR Code, Data Matrix, MicroQR, Aztec, GS1-DM, GS1-QR, Han Xin Stacked code: PDF417	
Min. accuracy	4 mil	
Sensor type	CMOS	
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	
Field of view	Horizontal 40°, vertical 34°	
Detection angle	Tilt angle ± 60°, skew angle ± 60°, rotation angle 360°	
Symbol contrast	20%	
Communication protocol	SmartSDK, TCP Client, FTP, TCP Server, UDP, Serial (RS-232)	SmartSDK, USB (HID/CDC), Serial (RS-232)
Electrical feature		
Data interface	Fast Ethernet (100 Mbit/s), RS-232, DC terminal	USB 2.0, DC terminal, RS-232
Power supply	12 VDC to 24 VDC	USB 2.0: 5 VDC; DC terminal: 12 VDC to 24 VDC
Current consumption	0.5 A (max.), 0.28 A (typical)	USB 2.0: 0.9 A (max.), 0.5 A (typical) DC terminal: 0.5 A (max.), 0.28 A (typical)
Mechanical		
Focal length	4.7 mm	
Ambient illumination	0 lux to 100000 lux	
Light source	White LED (polarized)	
Aiming system	Cross laser aiming	
Prompt	LED indicator, buzzer, vibrator	
Dimension	74.4 mm × 86.6 mm × 190.2 mm (2.9" × 3.4" × 7.5")	
Weight	Approx. 160 g (0.4 lb.)	
Ingress protection	IP52	
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	20% RH to 80% RH (no condensation)	
Drop height	Dropping: 1.8 m, 50 times Rolling: 0.5 m, 1200 times	
Static electricity resistant	± 16 kV (air discharge), ± 8 kV (contact discharge)	
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 IDH3000 Series Product	
Laser safety class	Laser 2
Wavelength	650 nm
Pulse width	8 ms
Maximum power	1 mW

Dimension

