

MICROHAWK® LONG RANGE

SPECIFICATIONS AND OPTIONS



MicroHAWK MV-30

Ultra-Compact
 Height: 25 mm (0.98")
 Width: 45 mm (1.77")
 Length: 38 mm (1.50")

Integrated LEDs



MicroHAWK MV-40

Ultra-Compact
 Height: 25 mm (0.98")
 Width: 45 mm (1.77")
 Length: 45 mm (1.77")

Integrated LEDs

See individual product specification sheets for dimension drawings and pin assignments.

DIMENSIONS

ID-30/MV-30

Height: 25 mm (0.98")
 Width: 45 mm (1.77")
 Length: 38 mm (1.50")
 Weight without Cable: 46 g (1.62 oz.)

ID-40/MV-40

Height: 25 mm (0.98")
 Width: 45 mm (1.77")
 Length: 45 mm (1.77")
 Weight: 68 g (2.40 oz.)

ENCLOSURE

ID-30/MV-30

IP54, Aluminum

ID-40/MV-40

IP-65/67, Aluminum

ENVIRONMENTAL

Operating Temperature: 0° to 45° C (32° to 113° F)
Storage Temperature: -50° to 75° C (-58° to 167° F)
Humidity: 5% to 95% (non-condensing)

EMISSIONS

EN 55022:2010 Class A Limits

ELECTRICAL

ID-30/MV-30

5 VDC ± 5%, 600 mA at 5 VDC (typ.)

ID-40/MV-40

4.75-30 VDC, 200 mV p-p max ripple, 150 mA at 24 VDC (typ.)

CONNECTOR

ID-30/MV-30

0.91 m Cable with High-Density 15-Pin D-Sub Socket

ID-40/MV-40

M12 12-Pin Power, M12 8-Pin Ethernet

PASSIVE POE

ID-40/MV-40 Only

24 Volt Passive Power over Ethernet, Type B. Requires passive PoE power supply.

COMMUNICATION

ID-30/MV-30

RS-232, USB 2.0 High Speed, Ethernet over USB/HID

ID-40/MV-40

RS-232, Ethernet TCP/IP, EtherNet/IP, PROFINET I/O

DISCRETE I/O

ID-30/MV-30

2 in/3 out: Trigger Input; New Master Input: 5-28 V rated (0.16 mA @ 5 VDC); Strobe Output; 2 General Purpose Outputs: 5V TTL-compatible, can sink 10 mA and source 10 mA

ID-40/MV-40

3 in/3 out: Optoisolated Trigger and Input Common; New Master: Bi-directional, Optoisolated, 4.5-28 V rated (10 mA @ 28 VDC); Outputs (1, 2, 3): Bi-directional, Optoisolated, 1-28 V rated ($I_{OE} < 100$ mA at 24 VDC, current limited by user)

ILLUMINATION

ID-30/MV-30

High-Output LEDs: Inner: 4 Red (625 nm), 4 White; Outer: 8 Red, White, Blue or IR
Operating Life: 50,000 hours @ 25° C

ID-40/MV-40

Inner Red: 4 LEDs, 625 nm nominal
Inner White: 4 LEDs
Outer Red, White, Blue or IR: 8 LEDs
Light Modes: Inner or Outer; Off, On, Strobe, Power Strobe; Power Strobe for Outer LEDs only
Operating Life: 50,000 hours @ 25° C

INDICATORS

TRIG, PASS, FAIL, MODE, LINK, PWR LEDs, 2 Target Pattern LEDs, 2 Good Read/Inspection Passed Green Flash LEDs

MEMORY

2 GB Non-Volatile Flash, 256 MB RAM

SOFTWARE

ID-30 and ID-40

WebLink

MV-30 and MV-40

AutoVISION Sensor, AutoVISION, Visionscape

SENSOR

SXGA (Monochrome): CMOS 1.2 MP, 1280 x 960 Pixels

Pixel Size: 3.75 μ m

Shutter: Global Shutter

Frames Per Second: Up to 42 Frames Per Second

Exposure Time: 50 - 100,000 μ s

OPTICS

Lens Type: Long Range Autofocus

Focal Length: 16.5 m

Autofocus Distance: 75 to 1,160 mm

SYMBOLOGIES

2D: Data Matrix (ECC 0-200), QR Code, Micro QR Code, Aztec Code

Stacked: PDF417, MicroPDF417, GS1 DataBar (Composite and Stacked)

Linear: Code 39, Code 128, BC412, Interleaved 2 of 5, UPC/EAN, Codabar, Code 93, Pharmacode, PLANET, POSTNET, Japanese Postal, Australia Post, Royal Mail, Intelligent Mail, KIX

SAFETY AND QUALITY

FCC, CE, UL, RoHS-Compliant

QMS CERTIFICATION

www.microscan.com/quality

©2018 Omron Microscan Systems, Inc. SP106A-EN-1018
 Specifications are subject to change.

Warranty - For current warranty information about this product, please visit www.microscan.com/warranty.

OMRON

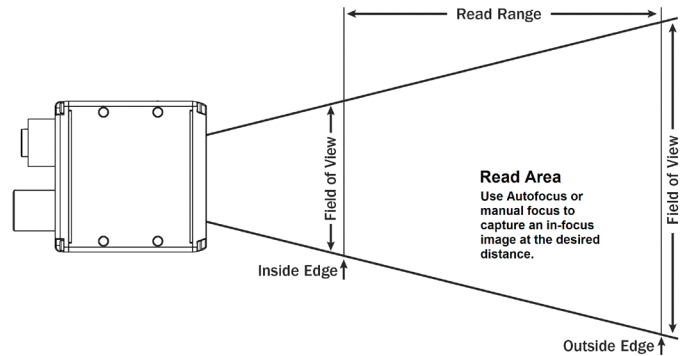
MICROSCAN

www.microscan.com

FIELD OF VIEW AND READ RANGE CHARTS

Long Range SXGA/Autofocus Field of View Chart

Object Distance (mm)	FOV Width (mm)	FOV Height (mm)
75	22	16
100	29	22
200	59	44
300	88	66
400	117	88
500	146	110
600	176	132
700	205	154
800	234	176
900	263	198
1,000	293	220
1,100	322	241
1,200	351	263
1,300	380	285
1,400	410	307
1,500	439	329
1,600	468	351
1,700	498	373
1,800	527	395
1,900	556	417
2,000	585	439



1D Read Ranges – Inside Edge to Outside Edge

Narrow Bar Size (mils)	Inside Edge (mm)	Outside Edge – High-Quality Labels (mm)	Outside Edge – Standard-Quality Labels/DPM (mm)
2.5	75	135	100
3.3	75	180	135
5	75	310	215
7.5	75	465	330
10	75	615	445
15	75	925	665
20	75	1,225	890
30	75	1,850	1,330
40	75	2,400	1,775

2D Read Ranges – Inside Edge to Outside Edge

Cell Size (mils)	Inside Edge (mm)	Outside Edge – High-Quality Labels (mm)	Outside Edge – Standard-Quality Labels/DPM (mm)
2.5	75	95	80
3.3	75	125	105
5	75	220	160
7.5	75	350	250
10	75	480	335
15	75	725	505
20	75	970	675
30	75	1,450	1,010
40	75	1,925	1,350

Note: Minimum 1D element is typically 1/2 the size of minimum 2D element. Example: 10 mil 2D = 5 mil 1D.

Omron Microscan and all product names and logos as noted are trademarks or registered trademarks of Omron Microscan Systems, Inc. All other trademarks are the property of their respective owners.