

VISION HAWK 智能相机



灵活的工业视觉系统

Vision HAWK作为灵活的工业智能相机可凭借其紧凑、便于使用的设计提供强大的视觉性能。适用于各类视觉用户，应用范围广泛。Vision HAWK的特点包括：直观的视觉界面，集成光源、高分辨率光学变焦和简单的即插即用式连接。

集成商和终端用户可凭借Vision HAWK获得可升级、全方位集成的视觉方案，用于进行各类检测、验证或自动识别应用。

Vision HAWK: 简介

- 全方位集成了处理器、镜头和光源
- 通过Microscan Link快速连接工业控制系统
- 保存多个作业
- 集成以太网网络
- 可选C-Mount镜头和彩色传感器型号



AutoVISION 软件 (WVGA/WUXGA/SXGA 仅黑白): 提供简易设置和运行时间界面, 可解决基本和中级视觉应用需求。



Visionscape 软件 (SXGA 彩色; WVGA/WUXGA/SXGA 黑白可选): 可使用脚本和其他高级编程功能。



Microscan Link: 在外部设备上 (如PLC, PC或HMI) 监测和管理工具值。



CloudLink: 在网页浏览器上自定义网络HMI界面显示连接工具值。

有关本产品的详细信息, 请访问 www.microscan.com。

功能强大

拥有功能强大的工具套件, 可凭借视觉技术解决各类自动化难题。Vision HAWK带有迈思肯专利液体镜头自动对焦功能, 满足大部分的视觉或条形码应用要求。

高级光学系统

高分辨率模块光学变焦系统可令Vision HAWK在距离物体和标签大约33毫米至2米的范围内进行检测。

全方位集成

Vision HAWK特别带有针对触发器和结果的板载光学隔离I/O连接。

升级系统

AutoVISION软件可升级为完整的Visionscape软件, 不费吹灰之力即可进行更为复杂的视觉应用。

使用简单

Vision HAWK除了具有紧凑造型便于灵活放置外, 内置AutoVISION软件。它带有直观界面、详细指导和模板库, 可轻松进行设置和应用。

坚固设计

Vision HAWK带有坚固的工业设计特征, 使用IP65/67合金铸件外壳和M12连接器。采用以太网集成协议用于高速通信。

应用实例

- 汽车制造
 - 装配验证
 - 零件识别
- 包装
 - 标签定位
 - 内包装物验证
- 电子制造
 - 装配验证和识别
- 半导体
 - 包装和元件

Vision HAWK: 功能

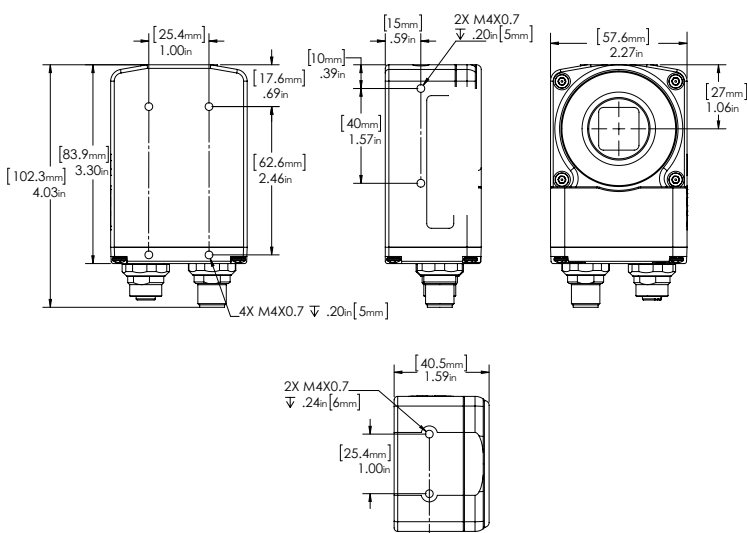
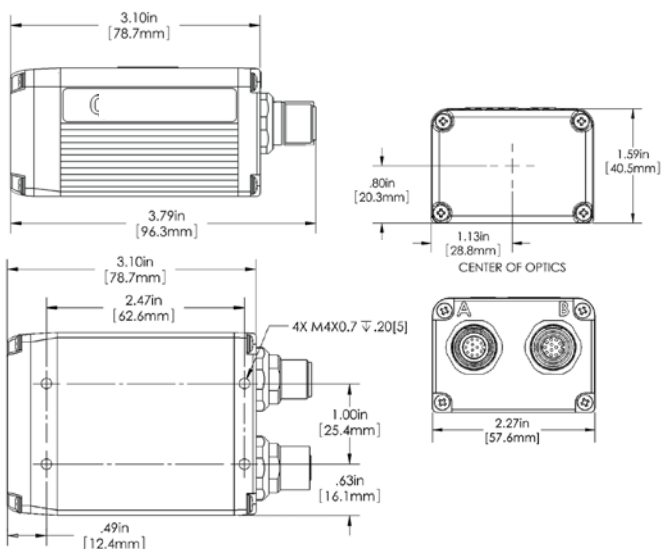


- 读取一维和二维码
- 光学字符识别 (OCR)
- 符号质量验证工具
- 动态零件定位
- 装配验证
- 尺寸测量

- 另加 Visionscape 选项:
- 图片转化和缩放
- 精准校验
- 自定义视觉工具 (脚本)
- 程序控制功能
- 50+ 机器视觉工具

MICROSCAN®

VISION HAWK SMART CAMERA SPECIFICATIONS AND OPTIONS



Note: Nominal dimensions shown. Typical tolerances apply.

MECHANICAL (INTEGRATED OPTICS)

Height: 1.59" (40.5 mm) **Width:** 2.27" (57.6 mm)
Depth: 3.79" (96.3 mm) **Weight:** 10 oz. (280 g)

MECHANICAL (C-MOUNT OPTICS)

Height: 4.03" (102.3 mm) **Width:** 2.27" (57.6 mm)
Depth: 1.59" (40.5 mm) **Weight:** 11 oz. (320 g)

ENVIRONMENTAL

Enclosure: Die-cast aluminum, IP65/67 rated
Operating Temperature: 0° to 50° C (32° to 122° F)
Operating Temperature (SXGA): 0° to 45° C (32° to 113° F)
Storage Temperature: -29° to 70° C (-20° to 158° F)
Humidity: Up to 90% (non-condensing)

COMMUNICATION INTERFACE

Interface: RS-232, Ethernet TCP/IP and EtherNet/IP

CE MARK

General Immunity for Light Industry:

EN 55024: 1998 ITE Immunity Standard

Radiated and Conducted Emissions of ITE

Equipment: EN 55022:98 ITE Disturbances

LIGHT SOURCE (INTEGRATED OPTICS)

Type: High output LEDs



SENSOR OPTIONS

Sensor: 1/3 inch
WVGA: CMOS, 752 by 480 pixels, up to 60 fps
SXGA (Mono & Color): CCD, 1280 by 960 pixels, up to 20 fps
WUXGA: 2/3 inch sensor, CMOS, 2048 by 1088 pixels, up to 48 fps (only available in C-mount configuration)

SHUTTER OPTIONS

WVGA: 25µs to 100ms (1/40,000 to 1/10), default = 400µs (1/2,500)
SXGA (Mono & Color): 6µs to 100ms (1/150,000 to 1/10), default = 666µs (1/1,500)
WUXGA: 25µs to 100ms (1/40,000 to 1/10), default = 400µs (1/2,500)

SYMBOLOGIES

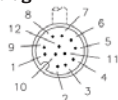
2D Symbolologies: Data Matrix (ECC 0-200), QR Code, Micro QR Code, Aztec Code, Dot Code
Stacked Symbolologies: PDF417, Micro PDF417, GS1 Databar (Composite & Stacked)
Linear Barcodes: Code 39, Code 128, BC 412, I2 of 5, UPC/EAN, Codabar, Code 93, Pharmacode, PLANET, PostNet, Japanese Post, Australian Post, Royal Mail, Intelligent Mail, KIX

ELECTRICAL

WVGA Power Requirement: 5-28 VDC, 200 mV p-p max ripple, 135 mA at 24 VDC (typ.)
SXGA (Mono & Color) Power Requirement: 5-28 VDC, 200 mV p-p max ripple, 170 mA at 24 VDC (typ.)
WUXGA Power Requirement: 5-28 VDC, 200 mV p-p max ripple, 140 mA at 24 VDC (typ.)

PIN ASSIGNMENTS

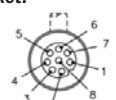
CONNECTOR A
M12 12-pin plug:



Pin Assignment

9	Host Rx D
10	Host Tx D
2	Power
7	Ground
1	Trigger
8	Input Common
3	Default
4	Input 1
5	Output 1
11	Output 2
6	Output 3
12	Output Common

CONNECTOR B
M12 8-pin socket:



Pin Assignment

1	Terminated
2	Terminated
3	Terminated
4	TX (-)
5	RX (+)
6	TX (+)
7	Terminated
8	RX (-)

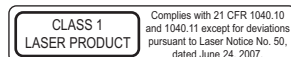
LASER LIGHT (INTEGRATED OPTICS)

Type: Laser diode

Output Wavelength: Red = 655 nm nominal; White = 6500K nm (typ.)

Operating Life: 50,000 hours @ 25° C

Safety Class: Class 1 visible laser



IMAGING RATES

WVGA CMOS: up to 60 full frame images/second
SXGA (Mono & Color): up to 20 full frame images/second
WUXGA CMOS: up to 48 full frame images/second

INDICATORS

LEDs: Trigger, Pass, Fail, Mode, Power, Network Activity, I/O

INTEGRATED OPTICS MODEL ONLY:

Green Flash: Good read **Red X:** Symbol locator

DISCRETE I/O

Input 1/Trigger: Bi-directional, optoisolated, 4.5–28V rated, (13 mA at 24 VDC)
Outputs (1, 2 & 3): Bi-directional, optoisolated, 1–28V rated, (I_{CE} <100 mA at 24 VDC, current limited by user)

PROTOCOLS

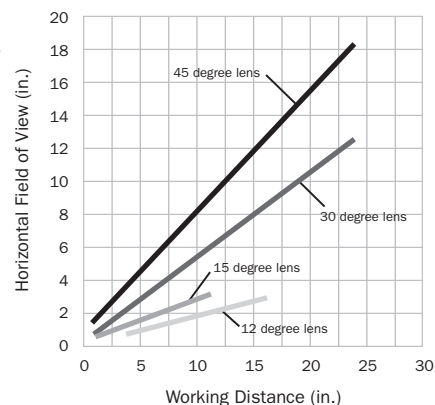
Point-to-Point, Point-to-Point w/XON/XOFF, Ethernet TCP/IP, EtherNet/IP, PROFINET I/O

SOFTWARE OPTIONS

WVGA, SXGA (Mono), WUXGA: AutoVISION included, Visionscape and Verification/OCV upgrades available
SXGA (Color): Visionscape included

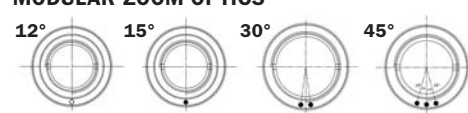
INTEGRATED OPTIONS MODEL:

FIELD OF VIEW AND WORKING DISTANCE



INTEGRATED OPTIONS MODEL:

MODULAR ZOOM OPTICS



ROHS/WEEE COMPLIANT

SAFETY CERTIFICATIONS

CDRH, FCC, UL/cUL, CE, CB, BSMI (compliant)

ISO CERTIFICATION

Certified ISO 9001:2008 Quality Management System

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 Performance data is determined using high quality Grade A symbols per ISO/IEC 15415 and ISO/IEC 15416 in a 25° C environment. For application-specific results, testing should be performed with symbols used in the actual application. Microscan Applications Engineering is available to assist with evaluations. Results may vary depending on symbol quality.
Warranty—For current warranty information on this product, please visit www.microscan.com/warranty.

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