

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

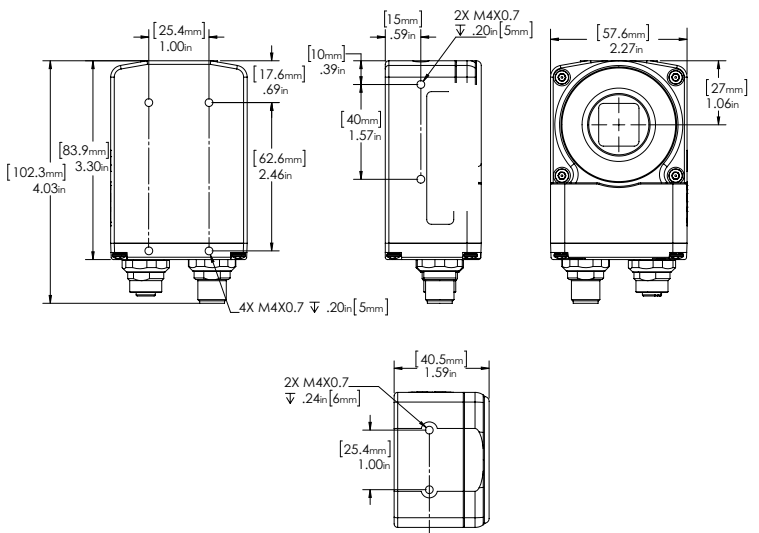
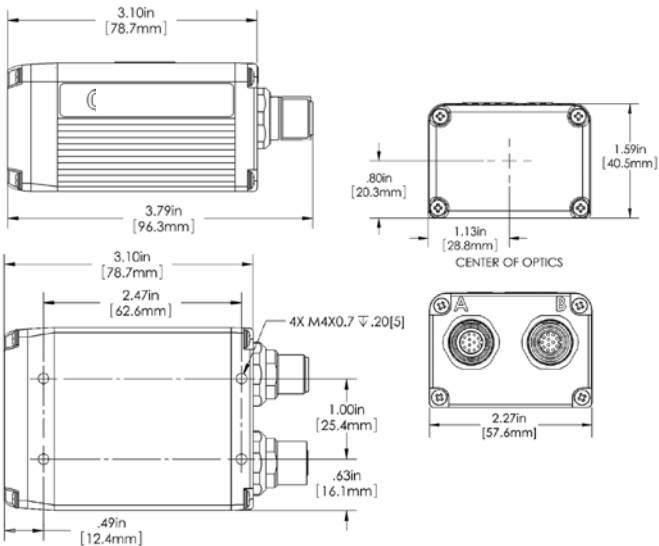


- 读取一维和二维码
- 光学字符识别 (OCR)
- 符号质量验证工具
- 动态零件定位
- 装配验证
- 尺寸测量

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

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

SYMBOLOGIES

2D Symbologies: Data Matrix (ECC 0-200), QR Code, Micro QR Code, Aztec Code, Dot Code
Stacked Symbologies: PDF417, Micro PDF417, GS1 Databar (Composite & Stacked)
Linear Barcodes: Code 39, Code 128, BC 412, I2 of 5, UPC/EAN, Codabar, Code 93, Pharmacoce, 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

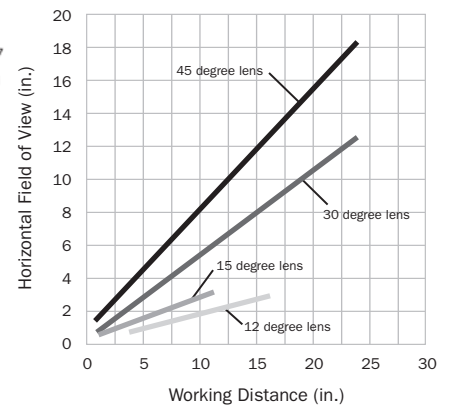
Point-to-Point, Point-to-Point w/XON/XOFF, Ethernet TCP/IP, EtherNet/IP, PROFINET I/O

SOFTWARE OPTIONS

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

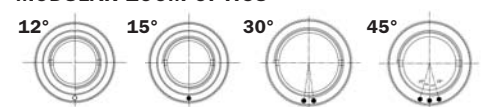
INTEGRATED OPTIONS MODEL:

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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