

VISIONSCAPE® GIG E



Integrated GigE Vision Solution

From an economical single camera system to a sophisticated eight camera application, Omron Microscan's Visionscape GigE Solution contains all necessary components for a complete, successful machine vision implementation.

PC-based Gigabit Ethernet systems leverage standard network components such as cabling, switches and interface cards. Visionscape GigE supports a complete set of Omron Microscan machine vision GigE cameras which, in combination with Visionscape software, allows for rapid deployment of any scale of machine vision solution.

Visionscape GigE: At a Glance

- High speed, high resolution image processing
- Provides full capabilities of powerful Visionscape software
- System implementation uses standard network components
- Support up to eight Visionscape GigE cameras
- GigE cameras in multiple configurations, including:

VGA MONO or COLOR CCD

VGA MONO CCD High Speed

XGA MONO or COLOR CCD

SXGA MONO or COLOR CCD (1.3 Megapixel)

UXGA MONO or COLOR CCD (2 Megapixel)

QSXGA MONO or COLOR CCD (5 Megapixel)

QSXGA MONO or COLOR CMOS (5 Megapixel)

QUXGA MONO CCD (8 Megapixel)

For more information on this product, visit www.microscan.com.

Visionscape GigE: Capabilities

- Linear Barcodes  • Image processing
 • Image analysis & feature extraction
- 2D Symbols  • Flaw detection
 • Object location
- OCR/OCV ABC123 • Dimensional measurements
 • Custom processing options

Gigabit Ethernet (GigE)

Gigabit Ethernet allows for high speed data transfers at one gigabit per second. With the Visionscape GigE solution, this system can be easily deployed using standard low-cost network components, long cable lengths and no frame grabber boards.

Flexible Configuration

Visionscape GigE cameras feature C-mount optics, and built-in strobe and trigger connections. A wide variety of sensor resolutions are available, ranging from VGA to QUXGA (8 MP), with CMOS, CCD, and color options.

Compact and Lightweight

Most Visionscape GigE cameras weigh less than 4 oz. with a small form factor to allow flexible positioning in tight spaces or mounting in robotic applications.

User Interfaces

Visionscape FrontRunner engineering user interface enables quick and easy creation of complex vision applications. The AppRunner runtime interface provides complete system status, application monitoring and results.

Application Examples

- Assembly verification (automotive, medical devices, packaging)
- Print quality inspection (pharmaceutical, other)
- Package quality inspection (food and beverage)
- Component presence/absence checking (electronics)
- Part location (robotics, machine builder)
- Part identification (automotive, electronics, packaging)

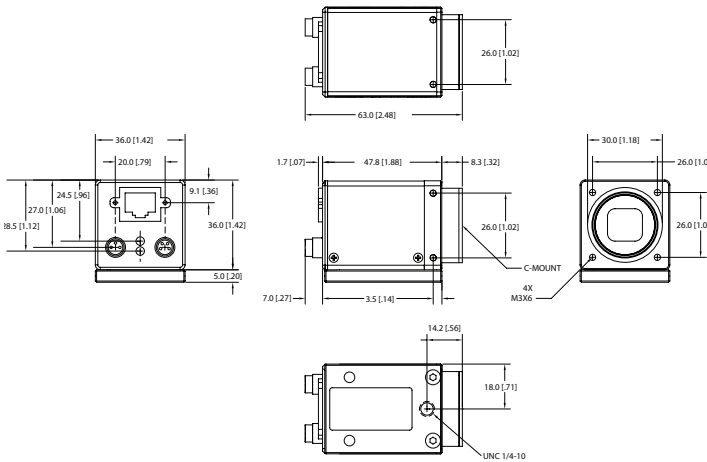
Specifications for Visionscape GigE PC

MINIMUM PC REQUIREMENTS:

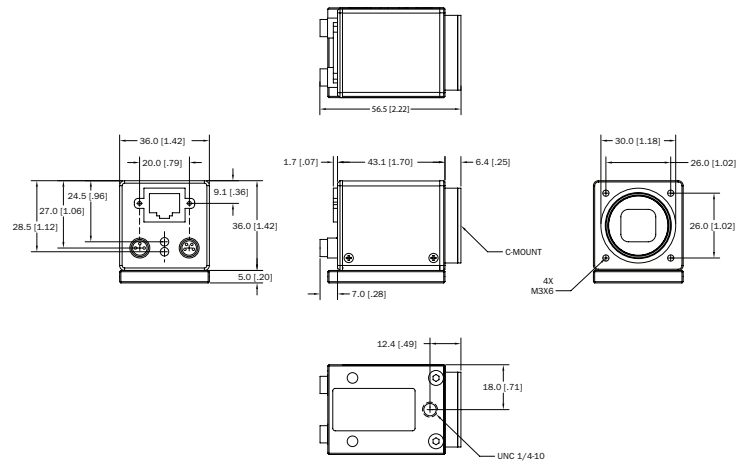
- Intel® Core™2 Duo Processor
- Internet Explorer 7 or higher
- 2GB RAM/128MB Video RAM (Windows 7); 1GB/128MB Video RAM (XP)
- 750MB hard drive space
- 16-bit color display
- 3.0 Windows Experience Index
- 1 USB port and 1 Network port
- Open PCIe slot for digital I/O card (if required)
- Built-in GigE network card or open slot for GigE network interface card

Specifications for Visionscape GigE Cameras

CCD CAMERA MODELS*



CMOS CAMERA MODELS



Note: Nominal dimensions shown. Typical tolerances apply.

MECHANICAL (CCD)*

Height: 1.42" (36 mm)
Width: 1.42" (36 mm)
Depth: 1.88" (47.8 mm)
Weight: ≤ 3.17 oz. (90 g)

MECHANICAL (CMOS)

Height: 1.42" (36 mm)
Width: 1.42" (36 mm)
Depth: 1.70" (43.1 mm)
Weight: ≤ 3.17 oz. (90 g)

COMMUNICATION PROTOCOLS*

Interfaces: Gigabit Ethernet

LIGHT COLLECTION

Progressive scan, full frame and partial frame

ELECTRICAL*

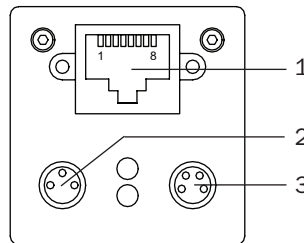
Power: 8 VDC at 450 mA to 30 VDC at 135 mA
Power Consumption: ~ 4 W

ENVIRONMENTAL*

Operating Temperature: 5° to 50° C (41° to 122° F)
Storage Temperature: -10° to 70° C (-14° to 158° F)
Humidity: 10% to 90% (non-condensing)

CONNECTORS

No.	Function
1	RJ45 Gigabit Ethernet
2	M8-3 Power
3	M8-4 Trigger & Strobe



SYMBOLGY TYPES

2D Symbologies: Data Matrix, PDF417, QR Code
Linear Barcodes: Code 39, Code 93, Code 128, UPC/EAN, UPC-E, UPC Supplementals, I2 of 5, BC412, Codabar, Postnet, Pharmacode, GS1 Databar and Composite

QMS CERTIFICATION

www.microscan.com/quality

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 Read Range and other 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 Read Range results, testing should be performed with symbols used in the actual application. Omron 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.



www.microscan.com

* Dimensions and specifications shown represent the most common camera models. Additional drawings and data can be found in the Visionscape GigE Camera User Manual.