

# VISIONSCAPE® GIG E



## Integrated GigE Vision Solution

From an economical single camera system to a sophisticated eight camera application, 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 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 available in multiple configurations:

**VGA MONO CMOS** (Color Optional)

**VGA MONO CCD** (Color Optional)

**VGA MONO CCD POE** (Power Over Ethernet)

**XGA MONO CCD**

**SXGA MONO CCD** (1.3 Megapixel)

**UXGA MONO CCD** (2 Megapixel)

**QSXGA MONO CCD** (5 Megapixel)

For more information on this product, visit [www.microscan.com](http://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

The Visionscape GigE camera features C-mount optics, built-in strobe and trigger connections and optional Power over Ethernet (PoE). A wide variety of sensor resolutions are available, ranging from VGA to QSXGA (5 MP), with CMOS, CCD and color options.

#### Compact and Lightweight

The Visionscape GigE camera weighs just 4 oz. and its small form factor allows for 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

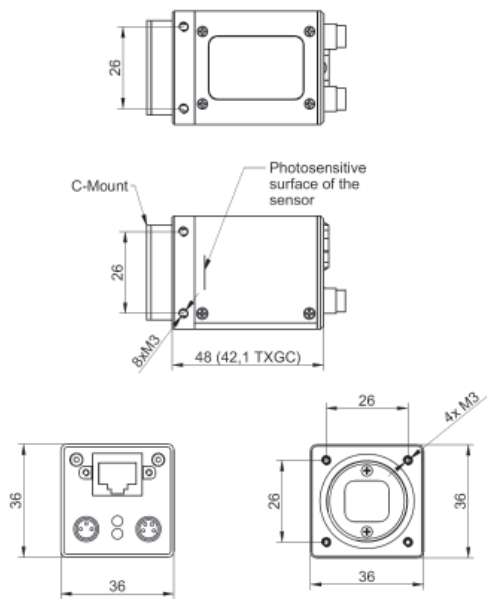
- Assembly verification (automotive, medical devices, packaging)
- Print quality inspection (pharmaceutical, other)
- Package quality inspection (food and beverage)
- Component presence/absence checking (electronics)
- Part location (robotics, machine builder)
- Part identification (automotive, electronics,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

**Specifications for Visionscape GigE PC**

**MINIMUM PC REQUIREMENTS:**

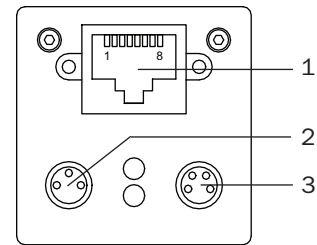
- Pentium P4 class PC (2.4 GHz or higher)
- Windows XP (SP2 or later), Windows Vista
- 1 GB minimum RAM
- XGA display (True Color or 64K)
- Open PCIe slot for Digital IO card – if required
- Built-in GigE network card or open slot for GigE NIC

**Specifications for Visionscape GigE Camera**



**CONNECTORS**

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



**CONFIGURATIONS**

Visionscape GigE Camera Model	Resolution	Sensor Size	FPS
VGA Mono CMOS, CMGC03	752 x 480	1/3"	60
VGA Color CMOS, CMG03c	748 x 476	1/3"	60
VGA Mono CCD, CMG03	656 x 494	1/3"	90
VGA Color CCD, CMG03c	656 x 490	1/3"	90
VGA Mono CCD (1/2" Sensor), CMG04	656 x 494	1/2"	57
XGA Mono CCD, CMG08	1032 x 776	1/3"	28
SXGA Mono CCD, CMG13	1392 x 1040	2/3"	20
UXGA Mono CCD, CMG20	1624 x 1236	1/1.8"	16
QSXGA Mono CCD, CMG50	2448 x 2050	2/3"	15
VGA Mono CCD POE, CMG03-P	656 x 494	1/3"	90

**MECHANICAL**

- Height:** 1.42" (36 mm)
- Width:** 1.42" (36 mm)
- Depth:** 1.66" (42.1 mm)
- Weight:** 4.0 oz. (115 g) with tripod mount

**COMMUNICATION PROTOCOLS**

**Interfaces:** Gigabit Ethernet

**LIGHT COLLECTION**

Progressive scan, full frame and partial frame

**ELECTRICAL**

- Power:** 8 VDC at 370 mA to 30 VDC at 120 mA
- Power Consumption:** 3.5 W

**ENVIRONMENTAL**

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

**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, Pharmacoce, GS1 Databar and Composite

**SAFETY CERTIFICATIONS**

FCC, CE

**ROHS/WEEE COMPLIANT**

**ISO CERTIFICATION**

Certified ISO 9001:2000 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**—One year limited warranty on parts and labor. Extended warranty available.

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