

Next Generation Color Vision

With three color vision systems, the In-Sight Micro family solves color applications ranging from low cost to high performance in the smallest size package. Combined with two powerful color algorithms, In-Sight Micro delivers robust color inspection to a wide variety of industries.

Powerful Color Tools

Redefining the capability of a color vision system, the two color tools included in In-Sight Explorer solve a wide variety of color applications from color sortation to color-based product-identification and assembly verification to highly sensitive monitoring of color hues. From food processing to consumer good packaging, from pharmaceutical inspection to automotive assembly, these color tools solve the most difficult color applications.



- **Match Color Tool:** Defining colors in either RGB and HSI color space, this 24 bit resolution color tool solves color sortation and monitoring applications – even for parts with very subtle color differences.



- **Extract Color Tool:** Complex multi-color models make this high performance tool capable of solving the toughest color applications. User feedback with color swatches, image marking, and slider adjustments eases the training process and ensures a robust color model definition. Pixel counting and output images allow the results of this tool to feed into other tools for additional inspection.



Broad Range of Choices

Whether low cost, high performance or small size are required of your color vision system, there's an In-Sight Micro vision system that's perfect.

- **Best Price / Performance In-Sight Micro 1100C:** Standard (640x480) resolution and performance empower this low cost unit to solve a wide range of applications.
- **High Performance In-Sight Micro 1400C:** At double the processing power, this standard resolution model quickly analyzes complex colors.
- **High Resolution In-Sight Micro 1403C:** Color meets ultra high resolution with 1600x1200 pixels of inspection power in this industry-leading model.

Need Industrial-Grade Ruggedness?

The same high-performance color tools can also be paired with In-Sight 5000 Series vision systems, wrapping the highly rugged IP67 package around your color application. Stainless steel IP68 In-Sight 5000 Series vision systems – also available with color sensors – brings vision-inspected quality assurance into food processing and pharmaceutical environments.

In-Sight Micro Color Models Specifications

Image

Sensor	
Standard Resolution	1/3-inch CCD
High Resolution	1/1.8-inch CCD
Resolution (pixels)	
Standard Resolution	640 x 480 VGA
High Resolution	1600 x 1200 UXGA
Acquisition	
Standard Resolution	24 bit color
High Resolution	58 full frames per second
High Resolution	7.5 full frames per second
Lens Type	
	CS-mount and C-mount (with 5mm extension, included)

Minimum Firmware Requirement

In-Sight version	Release 4.3.0 or later
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Memory

Job/Program	64 MB FLASH memory, unlimited storage via remote network device
Image Processing	128 MB

I/O

Trigger	One onboard opto-isolated, NPN/PNP, acquisition trigger input
Discrete Outputs	Two onboard opto-isolated, NPN/PNP, high speed outputs, 100 mA Max
Expansion I/O	8 inputs and 8 outputs when connected to CIO-MICRO or CIO-MICRO-CC I/O module
Status LEDs	Network, 2 user configurable.

Communications

1 Ethernet port, 10/100 BaseT, TCP/IP	
Standard Ethernet	TCP/IP, SMTP, FTP, Telnet, DHCP or static IP address.
Industrial Ethernet	EtherNet/IP, PROFINET, MC Protocol, Modbus TCP
Serial	RS-232C when connected to an optional I/O module.

Power

Class	Class 2 Power over Ethernet (PoE) device
Type	A or B accepted

Mechanical

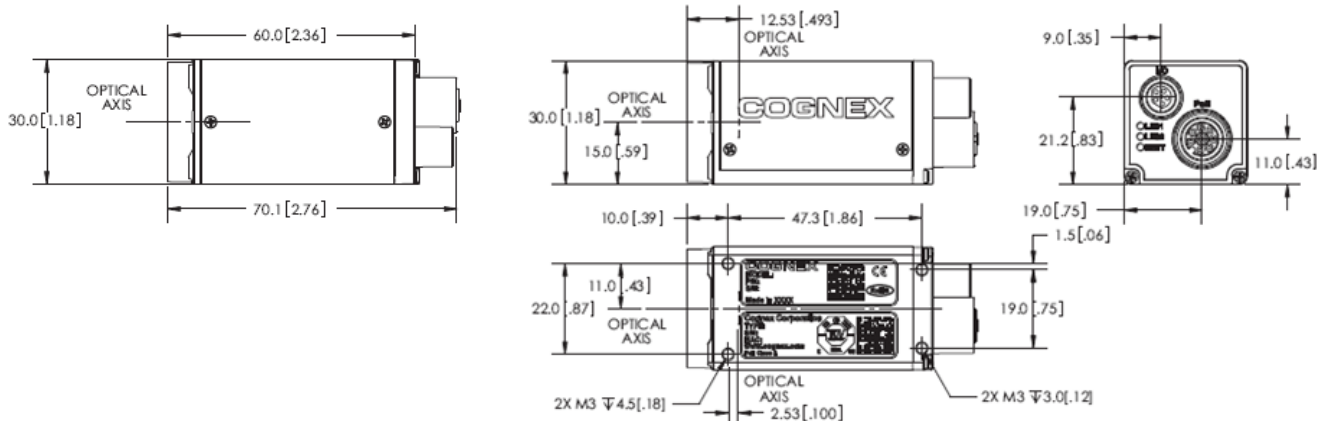
Material	Die-cast zinc housing and steel cover
Mounting	Four M3 threaded mounting holes or included 1/4"-20 mounting block
Dimensions	30mm (1.18in) W x 30mm (1.18in) H x 60mm (2.36in) D
Weight	145 g (5.1 oz.) with mounting block 120 g (4.2 oz.) without mounting block

Environmental

Operating Temp.	0° to 45°C (32°F to 113°F)
Storage Temp.	-30°C to 80°C (22°F to 176°F)
Humidity	90%, non-condensing
Protection	IP51
Shock	80 G per IEC 68-2-27
Vibration	10 G from 10-2000 Hz per IEC 68-2-6

Certifications

CE, FCC, TUV SUD NRTL, RoHS



COGNEX

Corporate Headquarters

Cognex Corporation
One Vision Drive
Natick
MA 01760-2059
USA
Tel: 508-650-3000
Fax: 508-650-3344

www.cognex.com

United States

Natick, Massachusetts 508-650-3000
Nashville, Tennessee 615-844-6158
Detroit, Michigan 248-668-5100
Chicago, Illinois 630-649-6300
Mountain View, California 650-969-4812

Latin America

Monterrey, Mexico +52 81 5030-7258
Mexico City, Mexico +52 55 2789-7839

Europe

Austria +43 (0)1 23060 3430
France +33 1 4777 1550
Germany +49 721 6639 0
Ireland +353 1 825 4420
Italy +39 02 6747 1200
Netherlands +31 402 668 565
Spain +34 93 445 67 78
Sweden +46 21 14 55 88
Switzerland +41 71 313 06 05
United Kingdom +44 1908 206 000

Asia

China +86 21 6320 3821
India +91 80 4022 4118
Korea +82 2 539 9047
Singapore +65 632 55 700
Taiwan +886 3 578 0060

Canada

905-634-2726

Japan

+81 3 5977 5400