

IN-SIGHT 2000 SERIES VISION SENSORS

In-Sight® 2000 series vision sensors combine the power of an In-Sight vision system with the simplicity and affordability of a vision sensor. Ideal for solving error-proofing applications, these vision sensors set new standards for value, ease of use and flexibility thanks to a powerful combination of proven In-Sight vision tools, simple setup, and a modular design featuring field changeable lighting and optics.

The In-Sight 2000 series includes an integrated, high-performance image formation system consisting of field interchangeable lenses and a patent-pending LED ring light that produces even, diffuse illumination across the entire image and eliminates the need for costly external lighting. Lenses and a variety of colored lights can be easily swapped out as needed to meet application requirements.

Together with the In-Sight Explorer EasyBuilder® interface, which provides a fast, step-by-step application setup, the In-Sight 2000 series allows even novice users to achieve extremely reliable inspection performance in nearly any production environment.

In-Sight 2000 series vision sensors can also be configured for in-line and right-angle mounting installation. This modular body design provides maximum flexibility to mount in tight spaces, simplifies wiring and optical paths, and minimizes the need to design new mechanical fixtures.



In-Sight 2000 Series: Features at-a-glance

- Affordable vision sensor powered by In-Sight Explorer software and EasyBuilder—the same interface used for advanced In-Sight vision systems
- Simple for both new and existing users to address automated inspection requirements
- Proven, reliable Cognex In-Sight vision tools
- Compact, modular design with field-changeable, integrated optics and lighting
- Fully compatible with Cognex VisionView® PC software and VisionView 900 HMI touchscreen panel

Fast, intuitive setup with EasyBuilder

The EasyBuilder setup interface is ideal for solving simple presence/absence inspections. Basic pass/fail inspections can be accomplished with intuitive, point-and-click setup tools. When more complex inspections are required, users can build on their experience to create vision applications using more advanced In-Sight vision systems—in the same In-Sight Explorer interface.



Powerfully simple and affordable vision sensors

Unmatched flexibility

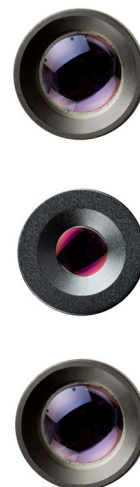
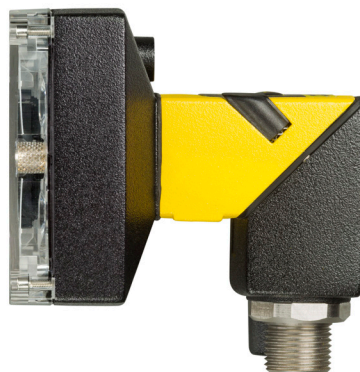
Field interchangeable lighting and optics make it easy to adapt to virtually any production line environment.

Powerful integrated light

Diffuse illumination technology enables robust vision inspection without the need for costly external lighting.

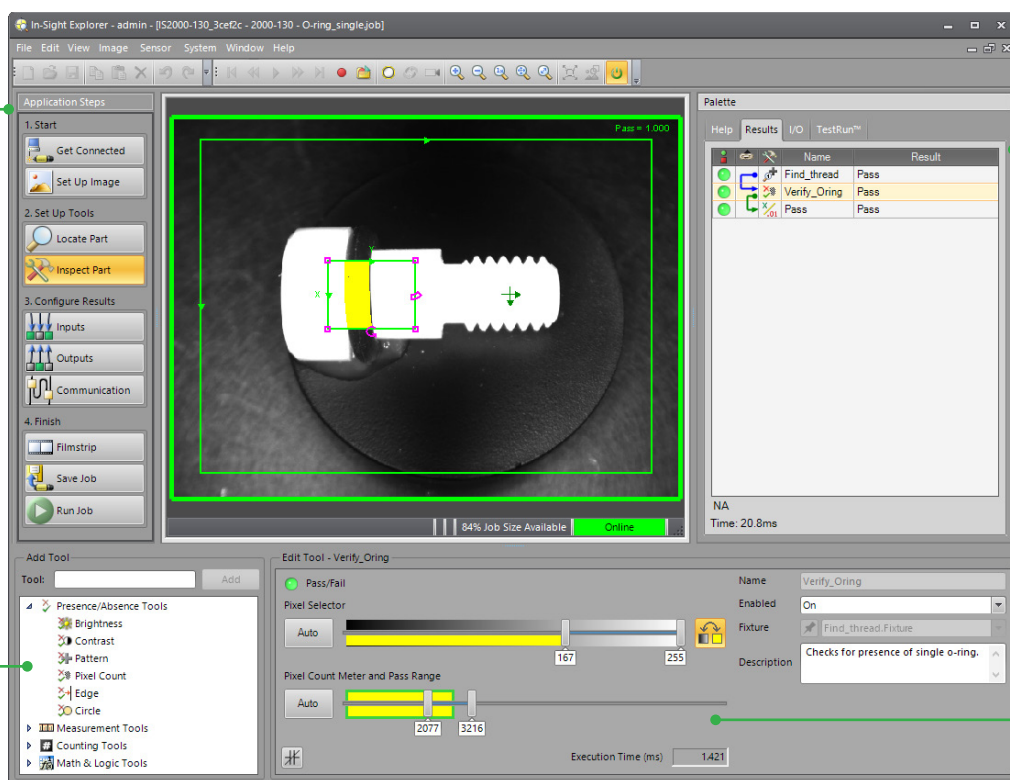
The simple set up of EasyBuilder

Ease-of-use is built into the heart of the In-Sight 2000 series starting with powerful vision tools and an In-Sight Explorer software interface that makes set up simple and assures a seamlessly reliable communications link to other factory automation equipment.



Simple steps guide you through configuring and deploying your application

Choose tools from the list to add them to your inspection

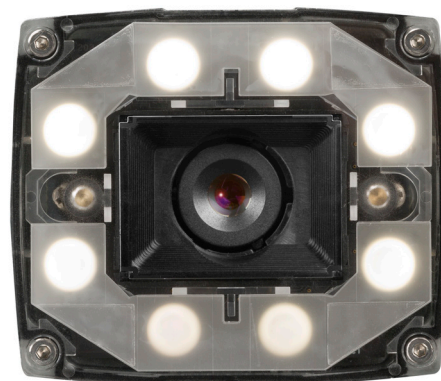


See inspection results at a glance

Point and click controls make it quick and easy to set up any tool to achieve reliable results

Three In-Sight 2000 models

All In-Sight 2000 series vision sensors offer easy application development with the step-by-step EasyBuilder interface. The In-Sight 2000-110 and In-Sight 2000-120 models offer Pass/Fail inspection capabilities. The In-Sight 2000-130 model features a significantly expanded range of location, pixel counting, brightness, contrast, measurement and counting vision tools.



		IN-SIGHT 2000 MODELS		
		2000-110	2000-120	2000-130
User Interface		In-Sight Explorer EasyBuilder, Cognex VisionView 900 and PC Software		
Imager	Type	1/3 inch CMOS, monochrome		
	Image Resolution	640 x 480 pixels (standard)	640 x 480 pixels (standard) 640 x 480 pixels (2x magnification)	640 x 480 pixels (standard) 640 x 480 pixels (2x magnification) 800 x 600 pixels (2x magnification)
	Acquisition Rate	20 fps	40 fps	
Lens	Standard M12 Lens	8 mm		
	Optional M12 Lenses	3.6 mm, 6 mm, 12 mm, 16 mm, 25 mm		
Lighting	Standard	8-LED diffuse ring light (white)		
	Options	8-LED diffuse ring lights (red and IR)		
		Light filters (red and IR) and polarized light cover		
Vision Tools	Part Location	Pattern	Pattern	Pattern Edge Circle
	Part Inspection	Pattern	Pattern Pixel count Contrast Brightness	Pattern Pixel count Contrast Brightness Edge Circle
	Measurement			Distance Angle Circle diameter
	Counting			Pattern Edge
Communications & I/O	Protocols	Ethernet, EtherNet/IP, PROFINET, SLMP, SLMP Scanner, FTP, RS-232 Text	Ethernet, EtherNet/IP, PROFINET, SLMP, SLMP Scanner, FTP, RS-232 Text	Ethernet, EtherNet/IP, PROFINET, SLMP, SLMP Scanner, TCP/IP, UDP, FTP, RS-232 Text
	Connections	M12: Ethernet M12: Power, I/O and Serial		
	Inputs	2 (1 trigger, 1 general purpose)		
	Outputs	4 (general purpose)		
Mechanical	Dimensions	98 mm x 68 mm x 45 mm		
	Weight	200 g		
Operating	Power	24VDC ±10%, 48W (2.0A) maximum when the illumination is on		
	Operating Temperature	4–40 °C		

COGNEX

Companies around the world rely on Cognex vision and ID to optimize quality, drive down costs and control traceability.

Corporate Headquarters One Vision Drive Natick, MA 01760 USA

Americas

Americas +1 844-999-2469

Europe

Austria +49 721 958 8052
 Belgium +32 289 370 75
 France +33 1 7654 9318
 Germany +49 721 958 8052
 Hungary +36 30 605 5480
 Ireland +44 121 29 65 163
 Italy +39 02 3057 8196

Netherlands +31 207 941 398
 Poland +48 717 121 086
 Spain +34 93 299 28 14
 Sweden +46 21 14 55 88
 Switzerland +41 445 788 877
 Turkey +90 216 900 1696
 United Kingdom +44 121 29 65 163

Asia

China +86 21 6208 1133
 India +9120 4014 7840
 Japan +81 3 5977 5400
 Korea +82 2 539 9980
 Singapore +65 632 55 700
 Taiwan +886 3 578 0060

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