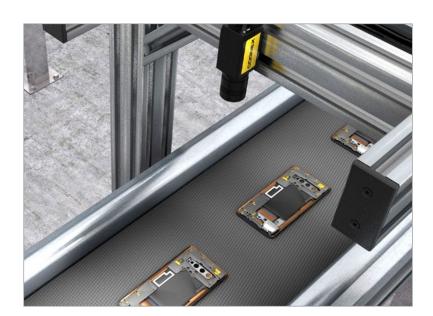
COGNEX

IN-SIGHT 8000 SERIES VISION SYSTEMS

The In-Sight® 8000 series, a family of ultra-compact, standalone smart camera vision systems, delivers industry-leading vision tool performance in the form factor of a traditional GigE Vision® camera.



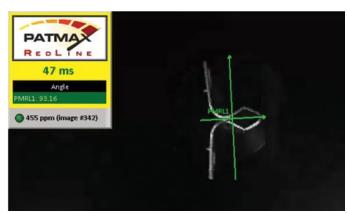
- World's smallest standalone vision system, available 0.3MP up to 5MP
- Powerful vision tool library including new PatMax RedLine,™ OCRMax,™ and IDMax®
- Step-by-step application setup using EasyBuilder[®], with the added flexibility and control of a spreadsheet with scripting
- High-speed communication with Gigabit Ethernet



PatMax, completely reinvented

PatMax RedLine was designed with one goal in mind: blazing fast pattern matching. In typical applications, PatMax RedLine runs 4 to 7 times faster than PatMax® — or faster! — with no loss of search accuracy or robustness. Together with PatMax RedLine, the 8000 series can reduce cycle times and increase throughput without compromising inspection accuracy.





Compact vision system fits just about anywhere

The In-Sight 8000 series compresses an entire stand-alone vision system into an amazingly small package. Its compact size, together with Power over Ethernet (PoE) to minimize cabling makes the In-Sight 8000 vision system family ideal for integrating into tight spaces on robots and hard-to-reach machinery anywhere on the production line. From high acquisition speed VGA to high resolution 5MP system, the In-Sight 8000 delivers the resolution and speed you need for your application, in a package the size of an image capture only camera.





High-performance vision tools

The In-Sight 8000 Series offers vision tools that are optimized to run at high speed. This includes PatMax RedLine pattern matching, image processing, color extraction, advanced defect detection, ID (1D, 2D, OCR, and color) as well as the foundation tools like blob, edge, histogram and non-linear calibration.

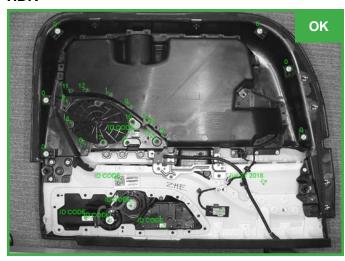
Advanced image formation technology

Low contrast environments present difficult challenges in multi-point assembly verification and fine detail inspection environments. Designed to solve these issues, the In-Sight 8505P model also features HDR+, which stretches the boundaries of high dynamic range (HDR) technology to enhance image contrast across the entire image with no reduction in acquisition speed. This creates a more uniformed image in a single acquisition allowing greater depth-of-field, faster line speeds, and improved handling of difficult to read inspection targets and codes.

No HDR

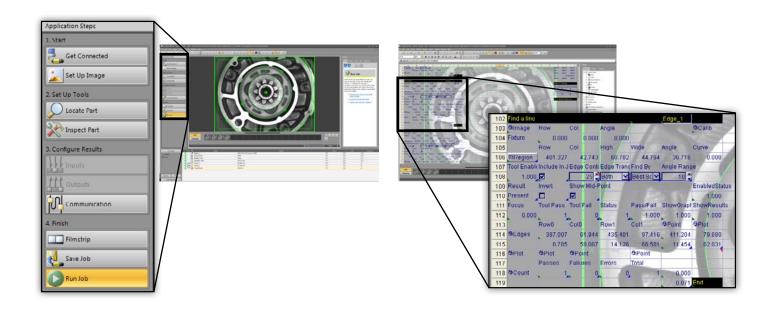


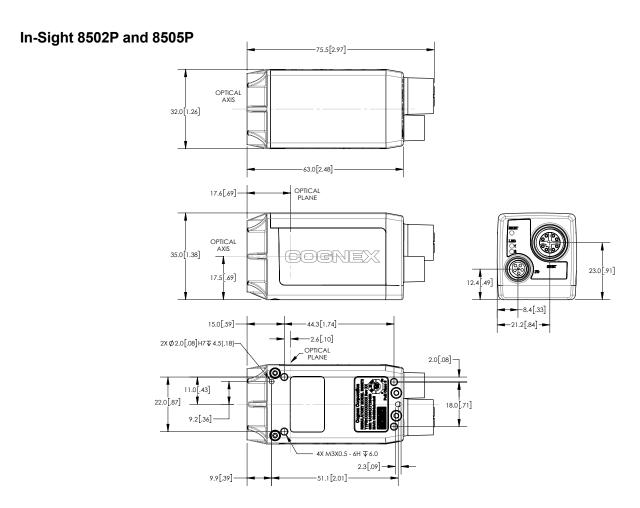
HDR+



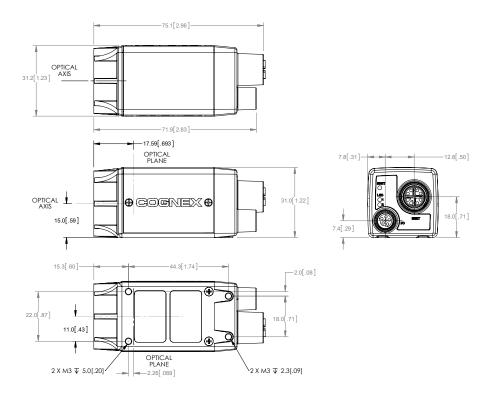
Flexible and easy integration

Like all In-Sight vision systems, the In-Sight 8000 series are conveniently setup with the In-Sight Explorer® software. In-Sight Explorer combines the guided step by step setup of EasyBuilder with the additional power and flexibility of the spreadsheet for greater control and customizing of application data.

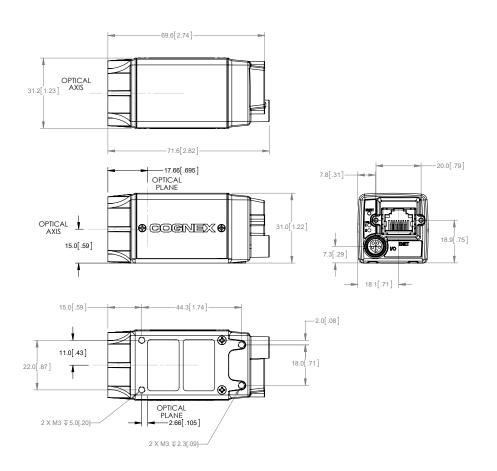




In-Sight 8100, 8101, 8200, 8400, 8401, 8402



In-Sight 8405



SPECIFIC	ATIONS									
		In-Sight 8100	In-Sight 8101	In-Sight 8200	In-Sight 8400	In-Sight 8401	In-Sight 8402	In-Sight 8405	In-Sight 8502P	In-Sight 8505P
Performance Factor		1X		1.7X	3.9X				4.6X	
Image Type		Monochome and Color						Monochrome	Monochrome and Color	
Job/Program Memory		512 MB							14.8 GB	
Image Processing Memory		512 MB								
Sensor Type		CMOS, global shutter						CMOS, rolling shutter	CMOS, global shutter	
Resolution		640 x 480	1280 x 1024	640 x 480	640 x 480	1280 x 1024	1600 x 1200	2592 x 1944	1920 x 1200	2448 x 2048
HDR+ Support ¹		No	No	No	No	No	No	No	Yes	Yes
Acquisition Rate (fps)	Monochrome	217	76	217	217	76	53	13	55	32
	Color	135	45	135	135	45	33	n/a	35	17
Lens Type		C-mount								
Indicator LEDs		Network status, 2 configurable LEDs								
Built-in I/O		1 dedicated trigger input, 2 high speed outputs (including strobe). Additional I/O available via CIO-MICRO ² external I/O module.								
Power		Class 2 Power over Ethernet (PoE)							Class 3 Power over Ethernet (PoE)	
Industrial Connectors		M12: Power/Ethernet, M8: I/O						RJ45: Power/ Ethernet, M8: IO	M12: Power/Ethernet, M8: I/O	
Industrial Pr	rotocols		OPC UA,	Ethernet/IP wit	h AOP, PROFII	NET Class B, iQ	SS, Modbus To	CP, SLMP/SLMI	^o Scanner	
Size		31 mm x 31.2 mm x 75.1 mm						31 mm x 31.2 mm x 71.6 mm	35 mm x 32 mm x 75.55 mm	
Weight		132.2 g 78 g							192 g	
Network Speed		10/1000/1000 Mbps (Gigabit)								
Rockwell Add-on Profile		Yes								

¹ HDR+ supported on monochrome models only.

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

Corporate Headquarters One Vision Drive Natick, MA 01760 USA

Regional Sales Offices

Americas North America Brazil

+1 844-999-2469 +55 (11) 2626 7301 +800 733 4116 Mexico

Europe

+49 721 958 8052 Austria Belgium +32 289 370 75 +33 1 7654 9318 +49 721 958 8052 Germany

Hungary +36 800 80291 +44 121 29 65 163 Ireland +39 02 3057 8196 Italy +31 207 941 398 Netherlands +48 717 121 086 Poland Spain +34 93 299 28 14 Sweden +46 21 14 55 88 +41 445 788 877 Switzerland Turkey +90 216 900 1696 United Kingdom +44 121 29 65 163

Asia China India Japan Korea Malaysia Singapore Taiwan

Vietnam

+86 21 6208 1133 +9120 4014 7840 +81 3 5977 5400 +82 2 530 9047 +6019 916 5532 +65 632 55 700 +886 3 578 0060 +66 88 7978924 Thailand +84 2444 583358

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² The In-Sight 8505P and 8502P vision systems must be connected to a Class 0, 3 or 4 PoE power source, rated for at least 12.95 Watts. The CIO-MICRO I/O module is a Class 2 PoE device and therefore cannot be used to supply power to the In-Sight 8505P/8502P vision system via the I/O module's PoE port.