

IN-SIGHT 8000 SERIES VISION SYSTEMS



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

- World's smallest, full line, standalone vision system available in VGA, 1MP, 2MP and 5MP resolutions
- Powerful vision tool library including new PatMax RedLine™ and color ID tools
- Step by step application setup with EasyBuilder, and flexibility of added control with spreadsheet and scripting
- High Speed communication with Gigabit Ethernet
- Fast acquisition VGA, 1MP and 2MP cameras

Compact vision system fits just about anywhere

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.

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.

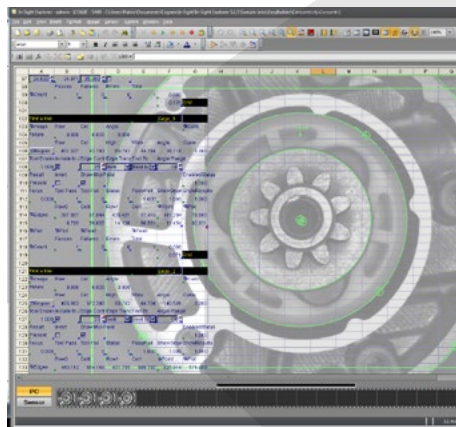
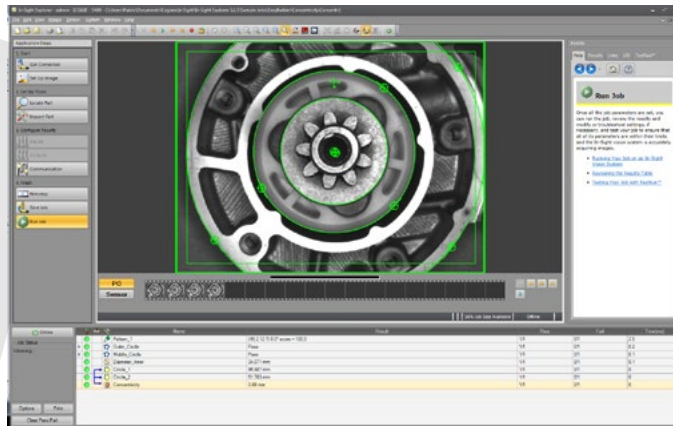
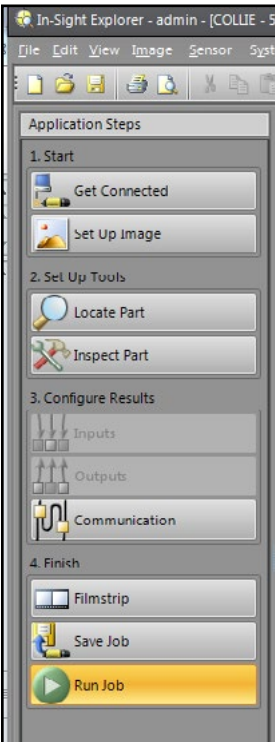


High-performance vision tools

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 (1-D, 2-D, OCR, and color) as well as the foundation tools like blob, edge, histogram and non-linear calibration.

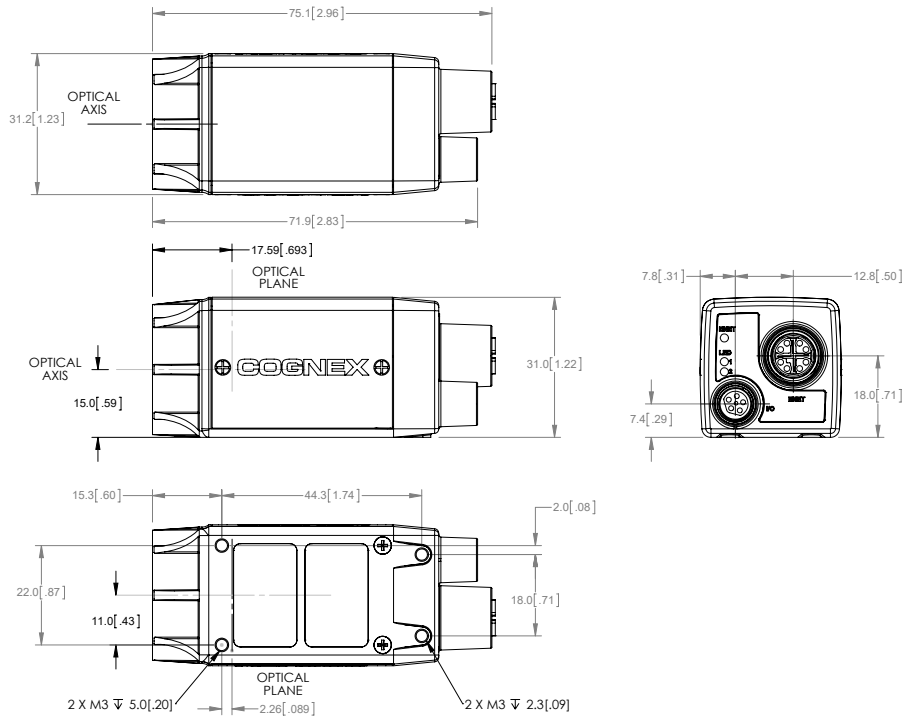
Flexible and easy Integration

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. Also included is the new scripting function which uses standard JavaScript to simplify data-intensive tasks like geometric analysis of hundreds of points, parsing and comparison of text or ID code results, or complex final result logic.

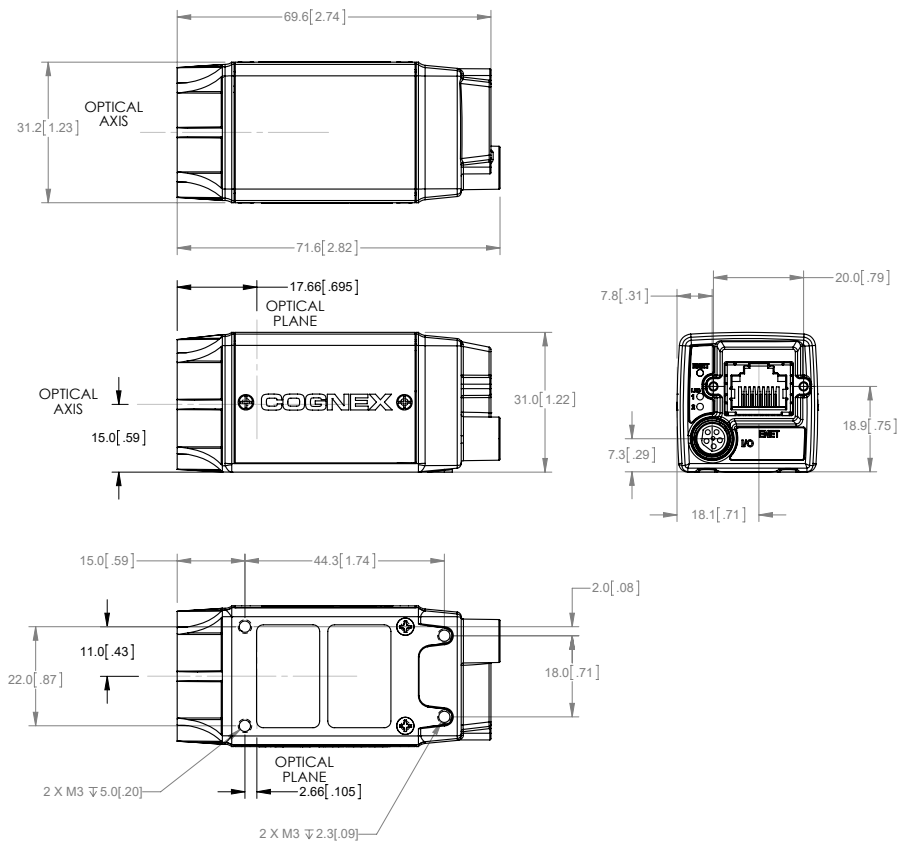


102 Find a line Edge 1										
103	Image	Row	Col	Angle						Calib
104	Fixture	0.000	0.000	0.000						
105	Row	Col	High	Wide	Angle	Curve				
106	Region	401.327	42.743	60.782	44.794	36.716	0.000			
107	Tool Enable	Include	In J	Edge	Cont	Edge	Trans	Find By	Angle Range	
108	1.000	<input checked="" type="checkbox"/>	25	Both	Best Sc	10				
109	Result	Invert	Show Mid-Point							EnabledStatus
110	Present	<input type="checkbox"/>	<input checked="" type="checkbox"/>							1.000
111	Focus	Tool Pass	Tool Fail	Status	Pass/Fail	Show Grap	Show Results			
112	0.000	1	0	1	1.000	1.000	1.000			
113	Row0	Col0	Row1	Col1	Point	Plot				
114	Edges	387.007	61.944	435.401	97.416	411.204	79.680			
115		8.785	59.087	14.126	66.581	11.454	62.831			
116	Plot	Plot	Point	Point						
117	Count	Passes	Failures	Errors	Total					
118	1	0	0	1	0.000					
119					0.071	End				
120										
121 Find a line Edge 2										
122	Image	Row	Col	Angle						Calib
123	Fixture	0.000	0.000	0.000						
124	Row	Col	High	Wide	Angle	Curve				
125	Region	465.083	572.340	60.782	44.794	140.501	0.000			
126	Tool Enable	Include	In J	Edge	Cont	Edge	Trans	Find By	Angle Range	
127	1.000	<input checked="" type="checkbox"/>	25	Both	Best Sc	10				
128	Result	Invert	Show Mid-Point							EnabledStatus
129	Present	<input type="checkbox"/>	<input checked="" type="checkbox"/>							1.000
130	Focus	Tool Pass	Tool Fail	Status	Pass/Fail	Show Grap	Show Results			
131	0.000	1	0	1	1.000	1.000	1.000			
132	Row0	Col0	Row1	Col1	Point	Plot				
133	Edges	450.112	554.180	401.715	589.797	425.914	571.989			

In-Sight 8200, 8400, 8401, 8402



In-Sight 8405



SPECIFICATIONS

	In-Sight 8200	In-Sight 8400	In-Sight 8401	In-Sight 8402	In-Sight 8405
Performance Factor	1X	2.3X			
Image Type	Monochrome and Color				Monochrome
Job/Program Memory	512 MB				
Image Processing Memory	512 MB				
Sensor Type	CMOS, global shutter				CMOS, rolling shutter
Resolution	640 x 480	1280 x 1024	1600 x 1200	2592 x 1944	
Acquisition Rate (fps)	217 (monochrome) 135 (color)	76 (monochrome) 45 (color)	53 (monochrome) 33 (color)	13 (monochrome)	
Lens Type	C mount				
Indicator LEDs	Network status; 2 configurable LEDs				
Built in IO	1 dedicated trigger in, 2 high speed outputs (including strobe). Additional IO available via external IO modules: CIO-MICRO				
Power	Class 2 Power over Ethernet (PoE)				
Industrial Connectors	M12: Power/Ethernet; M8: I/O				RJ45: Power/Ethernet; M8:IO
Size	31 mm x 31.2 mm x 75.1 mm				31 mm x 31.2 mm x 71.6 mm
Weight	132.2 g				78 g
Network Speed	1G (1000)/100/10 Mbps				
Rockwell Add-on Profile	Yes				

Note: All In-Sight 8000 models have full vision tool suite with PatMax. Optional PatMax RedLine tool.



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 +1 844-999-2469
Brazil +55 (11) 2626 7301
Mexico +01 800 733 4116

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
Malaysia +6019 916 5532
Singapore +65 632 55 700
Taiwan +886 3 578 0060
Thailand +66 88 7978924

© Copyright 2017, Cognex Corporation. All information in this document is subject to change without notice. All Rights Reserved. Cognex, PatMax, In-Sight, and EasyBuilder, are registered trademarks of Cognex Corporation. PatMax Redline, OCRMax, and QuickBuild are trademarks of Cognex Corporation. All other trademarks are property of their respective owners. Lit. No. ISM8000-DS-11-2017-EN

www.cognex.com