In-Sight 5000 Series





Self-contained vision system
Rugged industrial hardware
Powerful Cognex vision tool library
More than fifteen models to choose from
Easy to deploy and maintain

The unprecedented vision power and unmatched ruggedness of the In-Sight[®] 5000 series of vision systems help manufacturers around the world improve productivity, ensure product quality and lower manufacturing costs.

The In-Sight 5000 series vision systems provide industrial-grade features as standard:

- Rugged die-cast aluminum (IP67) housing,
- Stainless steel (IP68) case options,
- Sealed M12 connectors, and
- Protective lens covers.

In-Sight 5000 models at a glance

Standard resolution applications

The In-Sight 5000 series models offer a wide array of performance choices, all with IP67 (NEMA 6) rated protection. *Models: 5100, 5400, 5600*

High resolution applications

When large parts need to be inspected for small defects or precise measurements, turn to the high resolution models for greater accuracy. 5MP systems are available. *Models: 5401, 5403, 5603, 5605*

Color applications

If color is a factor, choose a model with the powerful color tools to inspect color features or recognize parts based on their color. *Models: 5100-C, 5400-C*

Line scan applications

The In-Sight line scan vision system builds an image line-by-line, as a product moves past the system. This method for acquiring images is suited to applications such as inspecting cylindrical objects and inspecting parts on a web. *Model: 5604*

Barcode reading and OCR (Optical Character Recognition) applications

These ID models offer unmatched identification software tools for reading and verifying 1-D and 2-D codes as well as human readable text. *Models: 5110, 5410, 5411, 5413, 5610, 5613, 5614, 5615*

Benefits of all In-Sight vision systems

Intuitive software options

The In-Sight Explorer spreadsheet view provides a robust, flexible and efficient way to configure the vision tools for your application. The flexible In-Sight Explorer EasyBuilder[®] user environment makes applications easy to set up and deploy for any user. www.cognex.com/insightexplorer

Smart tools

Patented, industry-leading tools such as PatMax[®], OCRMax[™], color, ID, blob, calibration, edge, and flaw detection are just a click away. **www.cognex.com/visiontools**

System validation

TestRun validation enables you to refine, test and verify inspection systems automatically.

www.cognex.com/testrun

Built-in communications

The Cognex Connect[™] suite offers the widest range of built-in communication protocols that interface to any PLC, robot or HMI on your factory network.

www.cognex.com/connect

Complete visualization

The VisionView[®] operator interface is ideal for monitoring and controlling systems on the factory floor—available on four platforms. www.cognex.com/visionview

Expansive hardware portfolio

Depending on your environment, mounting options, performance speed requirements, image acquisition type or application specific needs, there is an In-Sight vision system model for you. www.cognex.com/visionsystems

In-Sight 5000 Series

	Croad	Acauisition ²		Available	Resolution				User Interface		Supported Tools ³						
Model	Speed Rating ¹		Color Model	in Stainless Steel	640 x 480	1024 x 768	1600 x 1200	1K Line Scan	2448 x 2048	EasyBuilder	Spreadsheet	Essential Tools	Extended Tools	ID Tools	Color Tools	PatMax Available	Part Number
5100	4x	60	•		•					•	•	E	X		С	Р	IS5100-01/C01 IS5100-11/C11 (PatMax)
5110	4x	60			•					•	•						IS5110-01
5400	12x	60	•	•	•					•	•	E	X	0	C	Р	IS5400-01/C01 IS5400-11/C11 (PatMax) IS5400-S01/CS01 (Stainless Steel) IS5400-S11/CS11 (Both)
5401	12x	20				•				•	•	E	X			Р	IS5401-01 IS5401-11 (PatMax)
5403	12x	15		•			•			•	•	E	X	٠		P	IS5403-01 IS5403-11 (PatMax) IS5403-S01 (Stainless Steel) IS5403-S11 (Both)
5410	12x	60		•	•					•	•						IS5410-01 IS5410-S01 (Stainless Steel)
5411	12x	20				•				•	•						IS5411-01
5413	12x	15					•			•	•						IS5413-01
5600	20x	60			•					•	•	E	X			Р	IS5600-01 IS5600-11 (PatMax)
5603	20x	14					•			•	•	٨	X			Р	IS5603-01 IS5603-11 (PatMax)
5604	20x	44k lines ²						•		•	•	E	X			Р	IS5604-01 IS5604-11 (PatMax)
5605	20x	16							•	•	•	E	X			Р	IS5605-01 IS5605-11 (PatMax)
5610	20x	60			•					•	•						IS5610-01
5613	20x	14					•			•	•						IS5613-01
5614	20x	44k lines ²						•		•	•						IS5614-01
5615	20x	16							•	•	•						IS5615-01

NOTES:

1) Speed rating compared to In-Sight Micro 1020 model and does not include image acquisition rate. The 5604 and 5614 models have acquisition speed rated in lines per second.

2) Acquisition rate is based on minimum exposure, and a full image frame capture.

3) Supported tools:

All In-Sight 5000 models except those with ID only tools include the base tool set: brightness, contrast, pattern, edge, point-to-point geometry, distance, angle, plot and blob tools.

🗉 Essential tool set includes blob, edge, curve and line finding, histogram and geometry tools, image filters, pattern matching, and standard calibration.

🗴 Extended tool set includes non-linear calibration, surface flaw, masking and caliper tools. PatMax option available.

ID tool set includes: 1-D/2-D barcode reading and verification, text reading and verification (OCR/OCV) and image filters.

C. Color tool set includes MatchColor, ExtractColor, color historgram, color to greyscale filters and color to greyscale distance filter. Part numbers include "C."

P Includes PatMax, Cognex patented geometric pattern matching technology.

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 Tel: +1 508 650 3000 Fax: +1 508 650 3344

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