> **Self-contained vision systems**
>
> **Flexible, integrated lighting and lens options**
>
> **Autofocus feature and fast image capture**
>
> **Unmatched ease-of-use**
>
> **Powerful Cognex vision tool library**

You will find so many applications for the award-winning In-Sight® 7000 series of vision systems. These self-contained smart cameras feature autofocus, fast image capture, integrated lighting and lens with powerful vision tools for inspection, color and OCR models, and more. They also have the capability to power and control a range of external lighting—all in a compact, industrial IP67 package measuring 75mm x 55mm x 47mm.

Flexible lighting
The integrated, field-replaceable lighting options (red, blue, green, white and infrared) give you total flexibility. Unlike most vision systems, the In-Sight 7000 additionally has the capability to power and control external lighting directly eliminating the need for external power supplies which occupy valuable machine space.

Autofocus and lens options
You can easily set and save the optimal focus values associated with each job on your line. The autofocus feature simplifies setup for situations requiring regular part changes or projects that require the system to be placed in hard-to-reach spaces. In addition, integrated field-replaceable lenses, like C-mount, allow you to further customize each system for specific applications.

Fast image capture
The In-Sight 7000 delivers the highest acquisition speeds of all In-Sight products at over 100 frames per second. This rate provides reliable 100% automated inspection of products on the fastest production lines.

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 flexible 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

Model[1]	Speed Rating[2]	Acquisition[3] (fps)	Resolution		User Interface		Supported Tools[4]							Part Number
			800 x 600	1280 x 1024	EasyBuilder	Spreadsheet	Base Tools	Essential Tools	Extended Tools	ID Tools	Color Tools	PatMax Available	OCR Only	
7010	2x	102	•		•		B				C			IS7010-01
7020	2x	102	•		•		B	E						IS7020-01
7050	2x	102	•		•	•	B	E						IS7050-01
7200	6x	102	•		•	•	B	E	X	I	C	P		IS7200-01, IS7200-11 (PatMax)
7400	12x	102	•		•	•	B	E	X	I	C	P		IS7400-01, IS7400-11 (PatMax)
7402	12x	60		•	•	•	B	E	X	I	C	P		IS7402-01, IS7402-11 (PatMax)
OCR Models														
7230	6x	102	•		•								O	IS7230-01
7430	12x	102	•		•								O	IS7430-01
7432	12x	60		•	•								O	IS7432-01
ID Models														
7210	6x	102	•		•	•				I				IS7210-01
7410	12x	102	•		•	•				I				IS7410-01
7412	12x	60		•	•	•				I				IS7412-01

Notes:

1) In-Sight 7000 has four high speed input and four high speed output built in. I/O modules are available for additional I/O.

2) 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.

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

4) Supported Tools:

- **B** Base tool set includes brightness, contrast, pattern, edge, point-to-point geometry, distance, angle, plot and blob tools.
- **E** Essential Tool Set includes blob, edge, curve and line finding, histogram and geometry tools, image filters, pattern matching, and standard calibration.
- **X** Extended Tool Set includes non-linear calibration and caliper tool. PatMax option available.
- **I** 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 (7010 model with color identification only).
- **P** Includes PatMax, Cognex patented geometric pattern matching technology.
- **O** OCR model, EasyBuilder only, OCRMax, location tools and a subset of the Base tool set.