COGNEX

IN-SIGHT VC200 MULTI SMART CAMERA VISION SYSTEM

The In-Sight® VC200 multi smart camera vision system brings the proven reliability of standalone In-Sight vision systems to multi camera vision applications. You can easily attach up to four In-Sight cameras to a controller for multi-view inspections in your manufacturing environment. For the first time, you can leverage the power of distributed vision processing with multiple smart cameras for high-performance applications.

Easy system configuration and efficient exchange of result data

The In-Sight VC200 uses a flexible workflow diagram to control image acquisition, vision logic, decision making, and factory communication. The In-Sight spreadsheet is used to configure the smart cameras for vision inspection. The flexible diagram makes it easy to:

- Set up flexible multi smart camera triggering
- Exchange data and combine results from multiple inspections
- Create modern, powerful, web-based human machine interfaces (HMIs) for displaying images and results from all connected cameras
- Provide simultaneous, multi-user, platform-independent access to HMIs

Multi-user, Multi-client HMI Access

Performance

The In-Sight VC200 is the only multi-camera system that gets faster as you add cameras. The system also provides access to In-Sight's proven vision tools, including PatMax Redline,™ OCRMax™ and more.

Flexibility

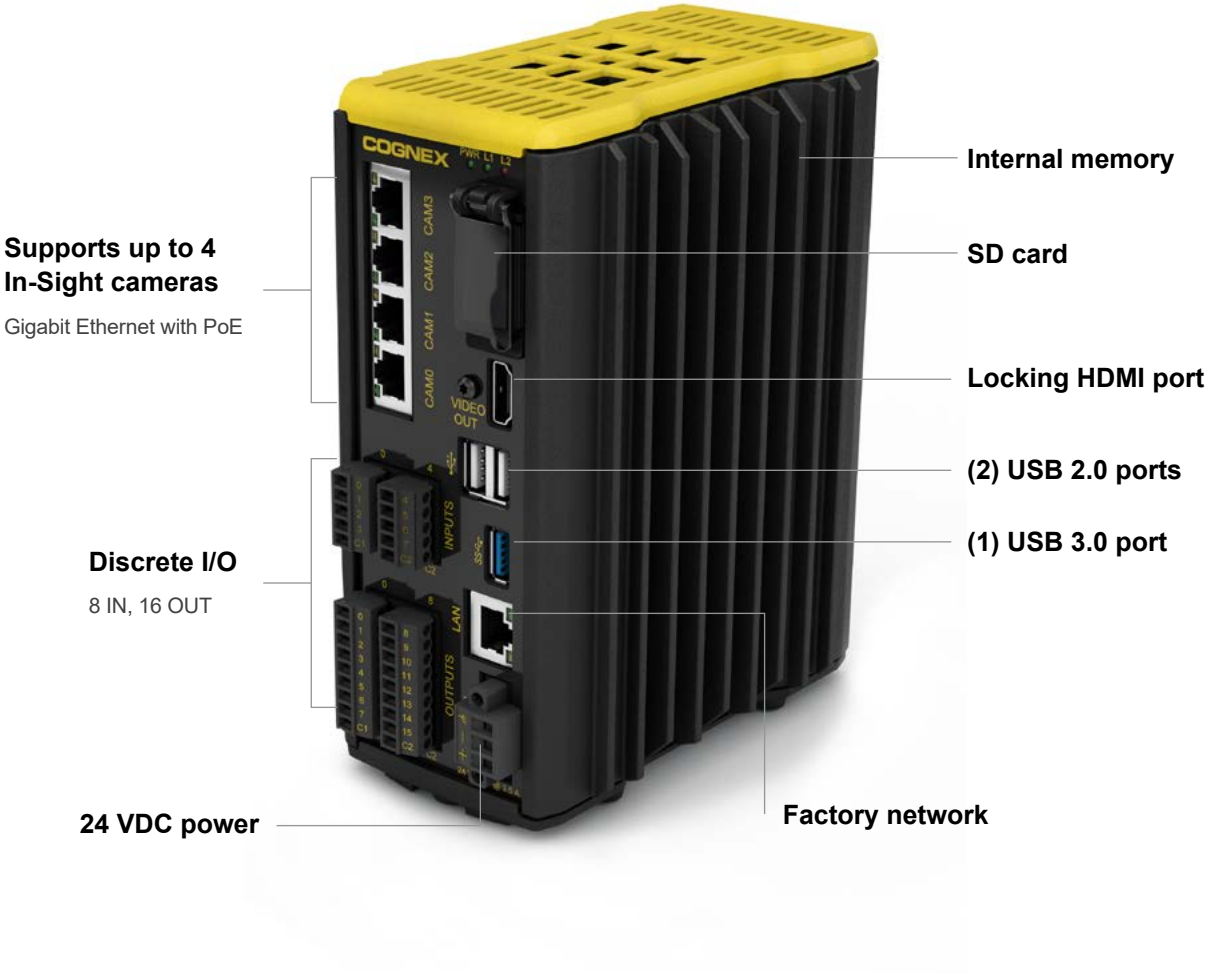
The graphical application workflow provides the flexibility to control triggering and acquisition. It also simplifies applications by separating the inspection into manageable tool blocks and communicates the combined results to a PLC.

Visualization

Platform independent HMI technology allows you to monitor and control the In-Sight VC200 on any device over the network using a web-browser without special hardware or installing additional software.

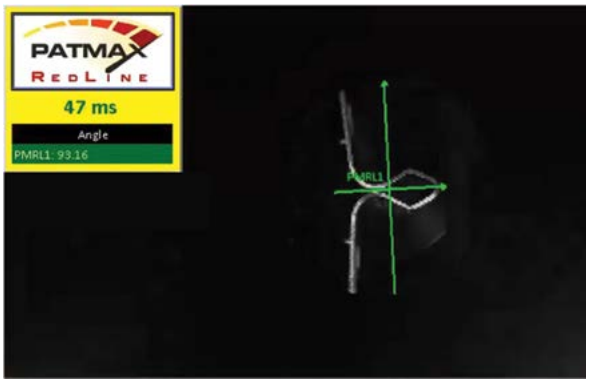
Increased performance with distributed processing

While traditional multi-camera systems slow down with each additional camera, the processing power of the In-Sight VC200 vision system actually increases with each smart camera added. This incremental power is possible because each smart camera contains its own processor—this allows you to run In-Sight vision tools, such as PatMax Redline, independently on each camera with no reduction in speed of the overall application regardless of how many cameras are attached.



Powerful In-Sight vision tools

The In-Sight VC200 multi smart camera vision system gives you access to the same powerful vision tools available on the In-Sight standalone cameras. The PatMax RedLine pattern matching tool quickly locates parts in as little as 20 milliseconds using a five megapixel image, despite adverse factory floor environments.

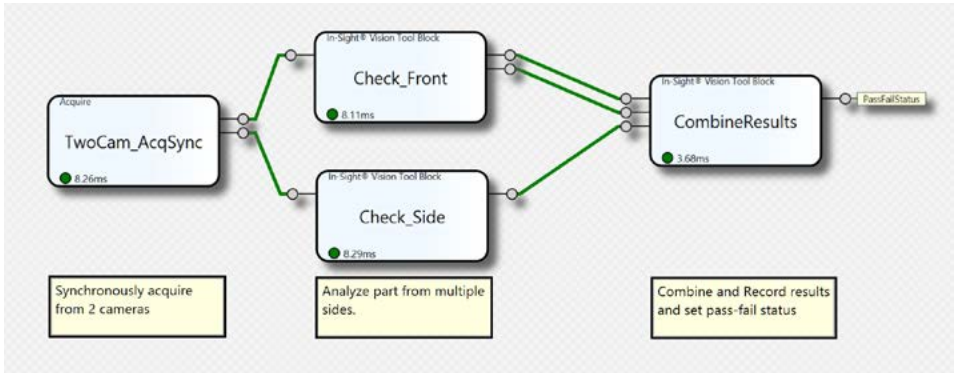


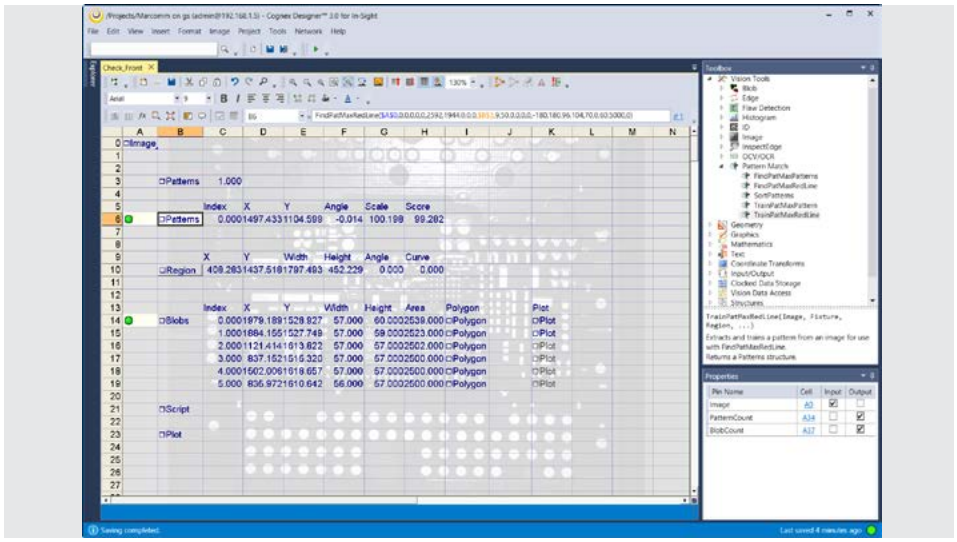
Mobile, platform-independent visualization

The In-Sight VC200 multi smart camera vision system also offers mobile, platform-independent visualization for accessing HMIs (human machine interfaces) from anywhere on the network. A simple point-and-click interface allows customers to build highly interactive, web-based HMIs remotely accessible via a web browser over the network.

Flexible workflow interface

The intuitive and self-documenting block-diagrams combined with the In-Sight spreadsheet allows you to easily configure individual smart cameras, as well as combine and communicate results. The system also offers the flexibility to configure multiple acquisition schemes: you can easily configure synchronous and truly asynchronous complex multi-camera applications with the system.





Specifications	Vision Controller
Supported Cognex Devices	ISC-8402 and ISC-8405 cameras
Job/Program Memory	8GB non-volatile flash memory. Unlimited storage via remote network device
Image Processing Memory	2GB SDRAM
Cooling System	Fanless Design
Inputs	8 optically isolated discrete inputs
Outputs	16 optically isolated discrete outputs
Camera Ports[1]	4 RJ-45 dedicated Ethernet ports for connecting directly to supported In-Sight cameras, additionally supplying Power over Ethernet
LAN Port[2]	1 RJ-45 Ethernet port, 10/100/1000 BaseT with auto MDIX. IEEE 802.3 TCP/IP Protocol. Dedicated port for connecting to wide area network
USB Ports[3]	1 host USB 3.0 port (5 Gb/sec.) and 2 host USB 2.0 ports (480 Mb/sec.) ports for connecting mouse, keyboard or storage device. USB drives should be formatted with a FAT32 file system
SD Card Slot	1 SD card slot for saving images, run time files and results. SD cards should be USH-I or USH-II and formatted with a FAT32 file system
Video Out Port	1 locking HDMI port that provides connection to a display device
I/O Terminal Connectors	16–26 AWG, solid or stranded wire. Torque 0.25 Nm (2.2 in-lb)
24VDC Power Connector	14–18 AWG, solid or stranded wire. Torque 0.6 Nm (5.3 in-lb)
Status LEDs	PWR LED, LED 1, LED 2
Housing	Aluminum, steel sheet metal, injection-molded housing
Mounting	Four bottom and four backside M4 x 0.7 threaded mounting holes. The vision controller may be optionally mounted using the accessory wall mounting bracket (823-10027-xR) or to a 35x15 mm DIN rail, using the accessory DIN rail mounting bracket (823-10028-xR)
Dimensions	178.8 mm (7.04 in) x 142.1 mm (5.59 in) x 75.1 mm (2.96 in)
Weight	1.45 kg (3.2 lb)
Current	3.5A (maximum)
Voltage	24VDC ±10%
Power Consumption	84W (maximum)
Operating Temperature[4]	0 °C to 45 °C (32 °F to 113 °F)
Storage Temperature	-30 °C to 80 °C (-22 °F to 176 °F)
Humidity	10%–85%, non-condensing (Operating and Storage)
Altitude	2,000 m (6565 ft)
Protection	IP30
Shock (Storage and Shipment)	30 G, per IEC 60068-2-7EA
Vibration (Storage and Shipment)	2 G, 2 hrs/axis (10-500 Hz) per IEC 60068-2-6, FC
Regulatory Compliance	CE, FCC, KCC, TÜV SÜD NRTL, RoHS

[1] To ensure reliable communication using 1000 BaseT operation, the Ethernet cable must not exceed 100 meters.
[2] To ensure reliable communication using 1000 BaseT operation, the Ethernet cable must not exceed 100 meters.
[3] Maximum USB port speeds are listed. Actual speeds are dependent on the USB device, which are typically lower.
[4] To ensure sufficient ventilation, the vision controller must be mounted with 50 mm of clearance above the vision controller and 50 mm of clearance on both sides. If an adjacent device also produces heat, additional space or cooling is required if air space around the vision controller exceeds 45 °C (113 °F).

COGNEX

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

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