



Features:

- Increase in product quality
- Streamline integration
- Maximize operational efficiency

The power of deep learning without the complexity

The In-Sight[®] 2800 vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. From simple presence/absence detection to complex categorization and sorting problems, In-Sight 2800 provides an easy to deploy solution for error-proofing tasks.

Increase product quality

Catch small, subtle defects with highly accurate, deep learning-based error detection capable of solving OK/NG applications and classifying parts with variation based on multiple defect types or user-defined features.

Streamline integration

Modular solutions for integrated lights and lenses takes the guesswork out of image optimization. Identifying the correct combination of accessories for your applicatin is only a few button clicks away.

Maximize operational efficiency

Leverage your existing workforce and keep your lines running with fast, intuitive job setup—no vision or deep learning expertise required.

Rule-based vision tools

In-Sight 2800 is also equipped with an extensive library of industry-proven traditional vision tools and algorithms including: Measure Distance, Pixel Count, Count Patterns, Math and Logic Tools, and much more.



Fig. left:

Set up multiple regions of interest (ROIs) to inspect different sections of your image with a single trigger.

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Application examples:





Specifications		
Image Sensor	1 / 2,8" CMOS monochrome and color	
Image Sensor Properties	Diagonal 6.17 mm; 2,8µm square pixels	
Image Resolution Options	SVGA ¹ (720x540), 1,6 MP (1440x1080)	
Electronic Shutter Speed	Min. exposure: 29μs Max. exposure: up tp 10 ms (internal illumination), up tp 200 ms (ext. illumination)	
Acquisition	Up to 45 Hz	
Lens Options	Multi Torch: 12 mm, 16 mm (High Speed Liquid Lens or manual focus lens) Mini: 6.2 mm or 16 mm High Speed Liquid Lens	
Discrete Inputs	2 opto-isolated	
Discrete Outputs	2 opto-isolated	
Other I/O Points	2 user configurable as inputs or outputs	
Status Outputs	5 status LEDs, audible beeper	
Lighting	Multi Torch: High-Powered Multi-Color 4 LED ring light (red, green, blue, white) Mini: 4 LED small form factor light for 6.2mm lens (red, blue, white, IR options) Mini HPIL: 4 LED small form factor high-powered light for 16 mm lens (red, white options)	
Communications	Serial and Ethernet interface	
Protocols	TCP/IP, PROFINET, EtherNet/IP™, SLMP, OPC/UA, FTP	
Power	24 V ±10%	
Power Consumption	≤7,5 W	
Materials	ABS, acrylic, aluminum alloy, NBR, PC, PET, PMMA, silicone, silicone rubber, stainless steel, TVP, zinc alloy	
Weight	6.2 mm: 141 g; 16 mm: 169 g; Multi Torch: 290 g; Right angle configuration adds 50 g	
Operating Temperature	0–40 °C (32–104 °F)	
Storage Temperature	-10–60 °C (14-140 °F)	
Operating and Storage Humidity	< 95% non-condensing	
Protection	IP67	

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vision & id



RoHS Certified	Yes
Approvals	EU CE, US FCC, TUV CB NRTL IEC 61010
¹ SVGA options are monochrome only	

Item No.	Description
042559	In-Sight 2800M-32710-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: SVGA Sensor (720x540) Standard Straight Mono Configuration 6.2MM HSLL Mini Light Red Illumination Clear Lens Cover Toolset: Edge Learning Classify Model IP67 Rated.
042561	In-Sight 2800M-42610-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: SVGA Sensor (720x540) Standard Straight Mono Configuration 16 MM HSLL HPIL Red Illumination Clear Lens Cover Toolset: Edge Learning Classify Model IP67 Rated.
042563	In-Sight 2801M-24220-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: 1.6 MP Sensor (1440x1080) Standard Straight Mono Configuration Multi Torch 12MM Lens Multi Torch RGBW Illumination Multi Torch Diffused Lens Cover Toolset: Edge Learning Classify Model IP67 Rated.
042565	In-Sight 2801M-24320-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: 1.6 MP Sensor (1440x1080) Standard Straight Mono Configuration Multi Torch 16MM Lens Multi Torch RGBW Illumination Multi Torch Diffused Lens Cover Toolset: Edge Learning Classify Model IP67 Rated.
042567	In-Sight 2801M-24520-EA vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: 1.6 MP Sensor (1440x1080) Standard Straight Mono Configuration Multi Torch 12MM HSLL Multi Torch RGBW Illumination Multi Torch Diffused Lens Cover Toolset: All Edge Learning IP67 Rated *Cables sold separately.
042568	In-Sight 2801M-24520-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: 1.6 MP Sensor (1440x1080) Standard Straight Mono Configuration Multi Torch 12MM HSLL Multi Torch RGBW Illumination Multi Torch Diffused Lens Cover Toolset: Edge Learning Classify Model IP67 Rated *Cables sold separately.
042570	In-Sight 2801M-24620-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: 1.6 MP Sensor (1440x1080) Standard Straight Mono Configuration Multi Torch 16MM HSLL Multi Torch RGBW Illumination Multi Torch Diffused Lens Cover Toolset: Edge Learning Classify Model IP67 Rated *Cables sold separately.
042572	In-Sight 2801M-32710-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: 1.6 MP Sensor (1440x1080) Standard Straight Mono Configuration 6.2 MM HSLL Mini Light Red Illumination Clear Lens Cover Toolset: Edge Learning Classify Model IP67 Rated *Cables sold separately.
042574	In-Sight 2801M-42610-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: 1.6 MP Sensor (1440x1080) Standard Straight Mono Configuration 16MM HSLL HPIL Clear Lens Cover Toolset: Edge Learning Classify Model IP67 Rated *Cables sold separately.
042575	In-Sight 2801C-24220-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: 1.6 MP

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	Sensor (1440x1080) Standard Straight Color Configuration Multi Torch 12MM Lens Multi Torch RGBW Illumination Multi Torch Diffused Lens Cover Toolset: Edge Learning Classify Model IP67 Rated *Cables sold separately.
042576	In-Sight 2801C-24320-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: 1.6 MP Sensor (1440x1080) Standard Straight Color Configuration Multi Torch 16MM Lens Multi Torch RGBW Illumination Multi Torch Diffused Lens Cover Toolset: Edge Learning Classify Model IP67 Rated *Cables sold separately.
042577	In-Sight 2801C-24520-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: 1.6 MP Sensor (1440x1080) Standard Straight Color Configuration Multi Torch 12MM HSLL Multi Torch RGBW Illumination Multi Torch Diffused Lens Cover Toolset: Edge Learning Classify Model IP67 Rated *Cables sold separately.
042578	In-Sight 2801C-24620-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: 1.6 MP Sensor (1440x1080) Standard Straight Color Configuration Multi Torch 16MM HSLL Multi Torch RGBW Illumination Multi Torch Diffused Lens Cover Toolset: Edge Learning Classify Model IP67 Rated *Cables sold separately.
042579	In-Sight 2801C-31710-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: 1.6 MP Sensor (1440x1080) Standard Straight Color Configuration 6.2 MM HSLL Mini Light White Illumination Clear Lens Cover Toolset: Edge Learning Classify Model IP67 Rated *Cables sold separately.
042580	In-Sight 2801C-41610-EC vision system combines deep learning technology with traditional rule-based vision tools to solve a wide range of inspection applications. System Specs: 1.6 MP Sensor (1440x1080) Standard Straight Mono Configuration 16MM HSLL HPIL White Clear Lens Cover Toolset: Edge Learning Classify Model IP67 Rated *Cables sold separately.