

In-Sight Model Comparison

General-Purpose Vision Sensors



		STANDARD		COLOR		HIGH PERFORMANCE		REMOTE HEAD		HIGH RESOLUTION	
		5100	5100C	5400C 5400CS	5400 5400S	5600	5400R	640 X 480	1024 X 768	1600 X 1200	
		5100	5100C	5400C 5400CS	5400 5400S	5600	5400R	5401	5403 5403S	5603	
Performance Multiplier	Average overall performance vs. a Model 5100 ¹	1X	1X	2X	2.5X	5X	2.5X	2X	2.5X	5X	
Memory	Firmware & Job Storage	32MB	32MB	32MB	64MB	32MB	32MB	32MB	32MB	32MB	64MB
Camera	Resolution	640 x 480	640 x 480	640 x 480	640 x 480	640 x 480	640 x 480	1024 x 768	1600 x 1200		
	CCD Sensor Size	1/3"	1/3"	1/3"	1/3"	1/3"	1/3"	1/3"	1/1.8"		
	Color	No	Yes	No	No	No	No	No	No		
	Acquisition Rate ² (frames per second)	60fps	60fps	60fps	60fps	40fps	20fps	15fps			
	Partial Image Acquisition	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes		
Protection Rating	IP67/NEMA6 ³	Note 10	Note 10	Note 10	Note 11	IP67/NEMA6 ³	Note 10				
Display Options	VGA Port	No	No	No	No	No	No	No	No		
	PC	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
I/O Options	Trigger/No. of High-speed Outputs	Yes/2 ⁶	Yes/2 ⁶	Yes/2 ⁶	Yes/2 ⁶	Yes/2 ⁶	Yes/2 ⁶	Yes/2 ⁶	Yes/2 ⁶		
	I/O Breakout/Expansion Modules	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	Ethernet I/O Support (up to 512in/ 512out)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Communication Options	Ethernet & RS232 (w/ Rx/Tx & RTS/CTS ⁷)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Lighting	Integrated Ring Light Options	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes		
Application Development	Control Pad/VGA Monitor	No	No	No	No	No	No	No	No		
	In-Sight Explorer/PC	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Lens Mount	C or CS	C	C	C	C/CS	C	C	C			
Vision Tool Support	PatMax [®] (optionally available)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	PatFind [®]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	1D Code Reading and Quality Metrics ⁸	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	2D Code Reading and Quality Metrics ⁹	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	IDMax [™] (for Data Matrix and QR 2D codes)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	Edge	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	Blob	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	Histogram	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	Image Processing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	OCV/OCR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Color Tools	No	Yes	No	No	No	No	No	No			
Power Consumption	Voltage Requirement	24VDC+/-10%	24VDC+/-10%	24VDC+/-10%	24VDC+/-10%	24VDC+/-10%	24VDC+/-10%	24VDC+/-10%	24VDC+/-10%		
	Maximum Current (Not including lighting)	350mA	350mA	350mA	250mA	350mA	500mA				
Max. Oper. Temp.	Camera	45 deg C	45 deg C	45 deg C	45/50 ⁵ deg C	45 deg C	45 deg C	45 deg C			
Approvals	CE, UL/CUL, FCC	Yes	Yes	Yes	Yes	Yes	Yes	Yes			

Notes:

- 1) Performance rating does not include image acquisition rate
- 2) Acquisition rate is based on 1ms exposure, and a full image frame capture
- 3) Requires lens cover (included) for IP/NEMA rated protection
- 4) Requires optional camera enclosure for IP/NEMA rated protection

- 5) Temperature ratings: processor/remote camera head
- 6) One high-speed output can be used for strobing
- 7) When used with an I/O Expansion Module (CIO-1450 or CIO-1460)
- 8) 1D codes include: Code 3 of 9, Code 128, Interleaved 2 of 5, Reduced Space Symbology (RSS), UPC/EAN, PostNet, Planet Code, Pharma Code, UPU-57, and ISO mark quality metrics