

Triton™

Designed for Demanding Industrial Environments

Polarization Models Available



- Active sensor alignment
- Fully tested against shock, vibration, water, dust, temperature, and EMI
- Lightweight, compact, IP67 upgradable



IP67 Upgradable

with IP67 lens tube and IP67 cables

Triton Models

Model	MP	Resolution	FPS	Sensor	Format	Pixel Size	Shutter	Lens Mount	Chroma	GigE Interface
TRI245S	24.5 MP	5320 x 4600 px	4.9 fps	Sony IMX540 CMOS	4/3"	2.74 μm	Global	C	M/C	M12
TRI204S	20.4 MP	4510 x 4510 px	5.9 fps	Sony IMX541 CMOS	1.1"	2.74 μm	Global	C	M/C	M12
TRI200S	20.0 MP	5472 x 3648 px	6 fps	Sony IMX183 CMOS	1"	2.40 μm	Rolling	C	M/C	M12
TRI162S	16.2 MP	5320 x 3040 px	7.5 fps	Sony IMX542 CMOS	1.1"	2.74 μm	Global	C	M/C	M12
TRI120S	12.3 MP	4096 x 3000 px	10 fps	Sony IMX304 CMOS	1.1"	3.45 μm	Global	C	M/C	M12
TRI122S	12.2 MP	4024 x 3036 px	9.7 fps	Sony IMX226 CMOS	1/1.7"	1.85 μm	Rolling	C	M/C	M12
TRI089S	8.9 MP	4096 x 2160 px	13.7 fps	Sony IMX267 CMOS	1"	3.45 μm	Global	C	M/C	M12
TRI071S	7.1 MP	3208 x 2200 px	17.2 fps	Sony IMX428 CMOS	1.1"	4.5 μm	Global	C	M/C	M12
TRI064S	6.3 MP	3072 x 2048 px	19.5 fps	Sony IMX178 CMOS	1/1.8"	2.40 μm	Rolling	C	M/C	M12
TRI054S	5.4 MP	2448 x 1860 px	23.1 fps	Sony IMX490 CMOS	1/1.55"	3.0 μm	Rolling	C	Color HDR	M12
TRI050S-P/Q	5.0 MP	2448 x 2048 px	24 fps	Sony IMX250MZR CMOS Sony IMX250MYR CMOS	2/3"	3.45 μm	Global	C	Polarized M Polarized C	M12
TRI050S	5.0 MP	2448 x 2048 px	24 fps	Sony IMX264 CMOS	2/3"	3.45 μm	Global	C	M/C	M12
TRI032S	3.2 MP	2048 x 1536 px	38 fps	Sony IMX265 CMOS	1/1.8"	3.45 μm	Global	C	M/C	M12
TRI028S	2.8 MP	1936 x 1464 px	42.5 fps	Sony IMX429 CMOS	2.3"	4.5 μm	Global	C	M/C	M12
TRI023S	2.3 MP	1920 x 1200 px	52 fps	Sony IMX392 CMOS	1/2.3"	3.45 μm	Global	C	M/C	M12
TRI016S	1.6 MP	1440 x 1080 px	77 fps	Sony IMX273 CMOS	1/2.9"	3.45 μm	Global	C	M/C	M12
TRI005S	0.5 MP	812 x 620 px	166.5 fps	Sony IMX433 CMOS	1/1.7"	9.0 μm	Global	C	M/C	M12
TRI004S	0.4 MP	728 x 544 px	291 fps	Sony IMX287 CMOS	1/2.9"	6.9 μm	Global	C	M/C	M12

Specifications

Interface, Power, and Size Information	
Digital Interface	1000BASE-T GigE M12, PoE
GPIO Interface	8 pin M8 connector
Opto-isolated I/O ports	1 input, 1 output
Non-isolated I/O ports	2 bi-directional
Dimensions	29 x 29 x 45* mm
Lens Mount	C-mount
Weight	67 g
Power Requirement	PoE (IEEE 802.3af), or 12-24 VDC external
Power Consumption	2.5W via V_ext; ~3.1W via PoE

*Not including lens barrel or interface ports

Standard and Certifications	
Standard	GigE Vision v2.0
Compliance	CE, FCC, RoHS, REACH, WEEE
Ingress Protection	IP67 (For IP67 protection Triton must be used with IP67 lens tube and cables)
Storage Temperature	-30 to 60°C
Operating Temperature	-20 to 55°C ambient
Shock and Vibration	DIN EN 60068-2-27, DIN EN 60068-2-64
Humidity	Operating: 20% ~ 80%, relative, non-condensing
Storage Humidity	20% ~ 95%, relative, non-condensing
Warranty	3 years

Imaging Properties	
Image Buffer	128 MB
Image Processing	Gain, gamma, black level, white balance, LUT, CCM, pixel correction, hue, saturation, color space conversion
Pixel Formats	Mono8/10/12/16, Bayer8/10/12/16, RGB8, YUV422, YUV-411 Mono8/12/16, PolarizeMono8/12/16 (TRI050S-P) BayerRG8/12/16, PolarizeMono8/12/16 (TRI050S-Q)
Image Modes	Horizontal and vertical binning, decimation, ROI, horizontal and vertical flip
ADC	12 bit
Gain Range	0 dB to 48 dB analog and digital
Exposure Time	30 µs to 10 s

Camera Features	
User Sets	1 default and 2 custom
File system size	16 MB
Chunk Data	Timestamp, frame counter, offset X/Y, width/height, exposure time, gain, black level, line status, sequencer set
Event Data	Acquisition start/end, exposure start/end, line rise/fall, error
Counter & Timer	2 counters and 2 timers
Sequencer	Exposure time, gain
Synchronization	Software trigger, hardware trigger, PTP (IEEE 1588)

C-Mount Model

