

Triton[®]10



Compact, IP67 High-Speed 10GigE Camera with RDMA



10GigE+RDMA
with Power over Ethernet



- 10GigE with RDMA
- Supports GigE Vision UDP protocol at 10GigE, 5GigE, 2.5GigE and 1GigE for broad compatibility
- 17-pin M12 GPIO, Active Sensor Alignment, PoE
- GigE Vision 3.0 Ready

Triton10 Models

Model	MP	Resolution	FPS	Sensor	Format	Pixel Size	Shutter	Lens Mount	Chroma	GigE Interface
TRX470S	47.0 MP	8232 x 5588 px	13.7 fps	Sony IMX492 CMOS	1.4-Type	2.315 µm	Rolling	TFL (M35 x 0.75)	M/C	10GBASE-T, M12
TRX245S	24.5 MP	5320 x 4600 px	35.5 fps	Sony IMX530 CMOS	4/3"	2.74 µm	Global	C-mount	M/C	10GBASE-T, M12
TRX246S	24.5 MP	5320 x 4600 px	28.6 fps	Sony IMX540 CMOS	1.2"	2.74 µm	Global	C-mount	M/C	10GBASE-T, M12
TRX204S	20.4 MP	4504 x 4504 px	42.8 fps	Sony IMX531 CMOS	1.1"	2.74 µm	Global	C-mount	M/C	10GBASE-T, M12
TRX205S	20.4 MP	4504 x 4504 px	34.1 fps	Sony IMX541 CMOS	1.1"	2.74 µm	Global	C-mount	M/C	10GBASE-T, M12
TRX162S	16.2 MP	5320 x 3040 px	53.0 fps	Sony IMX532 CMOS	1.1"	2.74 µm	Global	C-mount	M/C	10GBASE-T, M12
TRX163S	16.2 MP	5320 x 3040 px	42.8 fps	Sony IMX542 CMOS	1.1"	2.74 µm	Global	C-mount	M/C	10GBASE-T, M12
TRX124S	12.3 MP	4096 x 3000 px	89.7 fps	Sony IMX535 CMOS	1/1.1"	2.74 µm	Global	C-mount	M/C	10GBASE-T, M12
TRX125S	12.3 MP	4096 x 3000 px	54.9 fps	Sony IMX545 CMOS	1/1.1"	2.74 µm	Global	C-mount	M/C	10GBASE-T, M12
TRX081S	8.1 MP	2840 x 2840 px	129.8 fps	Sony IMX536 CMOS	2/3"	2.74 µm	Global	C-mount	M/C	10GBASE-T, M12
TRX071S	7.1 MP	3208 x 2200 px	91.1 fps	Sony IMX420 CMOS	1.1"	4.5 µm	Global	C-mount	M/C	10GBASE-T, M12
TRX051S	5.0 MP	2448 x 2048 px	201.3 fps	Sony IMX537 CMOS	1/1.8"	2.74 µm	Global	C-mount	M/C	10GBASE-T, M12
TRX028S	2.8 MP	1936 x 1464 px	216.0 fps	Sony IMX421 CMOS	2/3"	4.5 µm	Global	C-mount	M/C	10GBASE-T, M12

Specifications

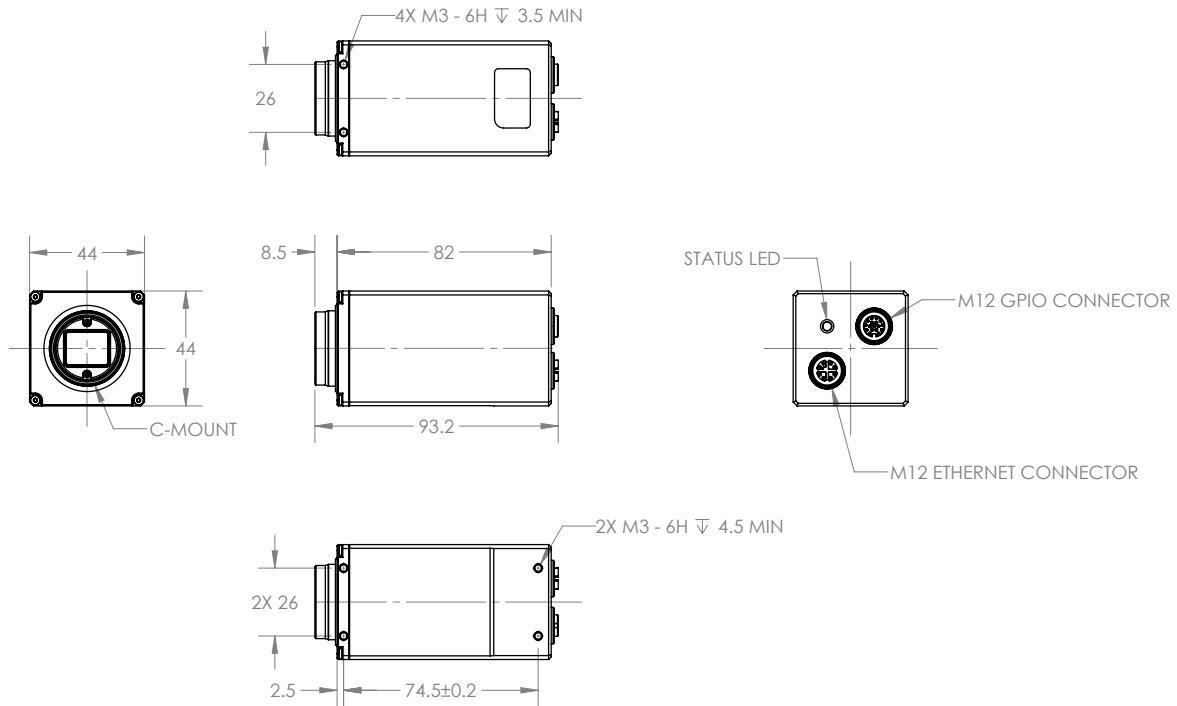
Interface, Power, and Size Information	
Digital Interface	10GBASE-T, 5GBASE-T, 2.5GBASE-T, 1000BASE-T, 100BASE-TX M12, PoE
Transport Layer Protocol	UDP (GigE Vision), RDMA (RoCE v2, GigE Vision 3.0)
GPIO Interface	17 pin M12 connector
Opto-isolated I/O ports	1 input, 3 output
Non-isolated I/O ports	2 bi-directional
Differential I/O ports	RS-422: 3 positive, 3 negative
Dimensions	44 x 44 x 82 mm
Lens Mount	C-mount
Weight	243 g
Power Requirement	PoE (IEEE 802.3af), or 12-24 VDC through GPIO
Power Consumption	<8.3W via PoE, <7.5W when powered externally

Standard and Certifications	
Standard	GigE Vision v2.0, GigE Vision v3.0 Ready
Compliance	CE, FCC, RoHS, REACH, WEEE
Storage Temperature	-30°C to 60°C
Operating Temperature	-20°C to 50°C ambient
Humidity	Operating: 20% ~ 80%, relative, non-condensing
Warranty	3 year

Imaging Properties	
Image Buffer	880 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, BGR8, YCbCr8, YCbCr411, YUV422, YUV411
Image Modes	Horizontal and vertical binning, decimation, ROI, horizontal and vertical flip
ADC	8, 10, 12 bit
Gain Range	0 dB to 48 dB analog and digital
Exposure Time	Model dependant, see specifications online

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

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17-Pin GPIO

2	LINE2	Nonisolated IO	RS-422 Differential Inputs	OPTOGNDB	11
4	LINE3			LINE6 (OUT)	10
12	LINE6PLUS	Isolated (Reserved) IO	GPIOs	LINE4 (OUT)	9
13	LINE6NEG			LINE0 (IN)	8
14	LINE7PLUS			LINE1 (OUT)	7
15	LINE7NEG			OPTOGNDA	6
16	LINE8PLUS			GND	5
17	LINE8NEG			VOUT	3
				VAUX	1

