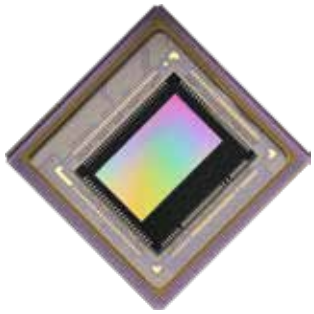
Triton™2 EVS

Event-Based Camera Designed for Demanding Industrial Environments

- Event-based vison sensor
- >10k fps Time-Resolution Equivalent with 120dB dynamic range
- Fully tested against shock, vibration, water, dust, temperature, and EMI
- Lightweight, compact, IP67 upgradable

2.5GiGE with Power over Ethernet

Model	MP	Resolution	FPS	Sensor	Format	Pixel Size	Shutter	Lens Mount	GigE Interface
TRT009S-EC	0.9 MP	1280 x 720 px	N/A	Sony IMX636 CMOS	1/2.5”	4.86 µm	N/A	C	2.5GigE M12
TRT003S-EC	0.3 MP	640 x 512 px	N/A	Sony IMX637 CMOS	1/4.5”	4.86 µm	N/A	C	2.5GigE M12



The IMX636 / IMX637 sensors were made possible through a collaboration between Sony and Prophesee, by combining Sony's CMOS image sensor technology with Prophesee's event-based method vision sensing technology.

PIXEL INTELLIGENCE

Bringing intelligence to the very edge

Inspired by the human retina, at the heart of Event-Based Vision sensors, each pixel embeds its own intelligence processing enabling them to activate themselves independently, triggering events.

SPEED

>10k fps Time-Resolution Equivalent

There is no framerate tradeoff anymore. Take full advantage of events over frames and reveal the invisible hidden in hyper fast and fleeting scene dynamics.

DYNAMIC RANGE

>120dB Dynamic Range

Achieve high robustness even in extreme lighting conditions. With Event-Based Vision sensors you can now perfectly see details from pitch dark to blinding brightness in one same scene, at any speed.

LOW LIGHT

0.08 lx Low-Light Cutoff

Sometimes the darkest areas hold the clearest insights. Event-Based Vision enables you to see events where light almost does not exist, down to 0.08 lx.

DATA EFFICIENCY

10 to 1000x less data

With each pixel only reporting when it senses movement, Event-Based Vision sensors generate on average 10 to 1000x less data than traditional image-based ones.

POWER EFFICIENCY

3nW/event

The sensor's pixel independence and overall architecture enable new levels of power efficiency with just 3nW/event and 26mW at sensor level.

LUCID VISION LABS

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Specifications

Interface, Power, and Size Information	
Digital Interface	2.5GBASE-T / 1000GBASE-T, M12 (8-Pin X-Coded), PoE
GPIO Interface	8-pin M8 connector IEC 61076-2-104
Opto-isolated I/O ports	1 input, 1 output
Non-isolated I/O ports	2 bi-directional
Dimensions	44 x 29 x 45.3* mm
Lens Mount	C-mount
Weight	90 g
Power Requirement	PoE (IEEE 802.3af), or 12-24 VDC external
Power Consumption	3.5W via PoE, 3.1W when powered externally

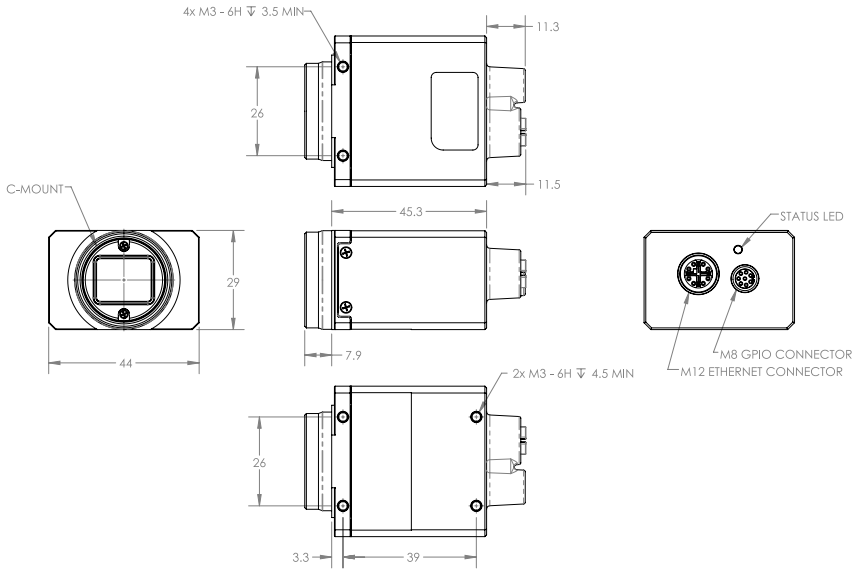
***Not including lens barrel or interface ports**

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 DIN EN 60068-2-6
Humidity	Operating: 20% ~ 80%, relative, non-condensing
Warranty	3 year

EVS Properties	
Stream Data Format	EVT 3.0
Adjustable Biases	Low pass filter cutoff, positive event threshold, negative event threshold, refractory period, high pass filter
EVS-Related Features	ROI, digital event mask, external trigger function
Event Signal Processing	Anti-flicker filter, event burst filter, event rate control (ERC)
Software	Compatible with Arena™ SDK or Prophesee Metavision® SDK

Camera Features	
User Sets	1 default and 2 custom user set
File system size	16 MB
Chunk Data	Not supported
Event Data	Test, Frame Dropped, Data Overrun
Counter & Timer	2 counters and 2 timers
Sequencer	Not supported
Synchronization	Software trigger, hardware trigger, PTP (IEEE 1588)

C-Mount Model



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