



# THERMAL VISION SENSOR



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# About Thermal Vision Sensor

TvITS is an AI powered thermal sensor based smart vision camera designed for road traffic applications. The thermal imaging sensor provides high data accuracy in any light conditions (complete darkness or glaring sunlight) and in all weather conditions. TvITS is equipped with in-built hardware electronics capable of running AI based video analytics. The lens mount provides flexibility for interchangeable lenses depending on the application requirement. The camera hardware is capable to deploy different applications.

## Specifications

### POWER

Operating Voltage	12-36 V DC
Power over Ethernet (PoE)	PoE A and PoE B

### PROCESSOR SYSTEM (MPSoC –ZU4EV)

Application Processor	Quad-core ARM Cortex-A53
Operating Frequency	1.5GHz
Real-Time Processor	Dual-core ARM Cortex-R5, up to 600MHz
Graphics Processor	Mali™-400 MP2
Programmable Logic	192 K System Logic Cells
RAM	2 GB DDR4 SDRAM for PS and 1 GB for PL
Flash	8GB eMMC Flash (Expandable)
Video Codec	H.264 / H.265

### CONNECTIONS & COMMUNICATIONS

Ethernet/5G/4G	Server communication and configuration
CAN	External Communication Interface

## Specifications

### COMPLIANCE

Protection Grade	Housing & Connectors IP67 grade
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Shock & Vibration	IEC 60870-2-27
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Temperature Range	0 to 55° C
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### IMAGING & OPTICAL

Detector Type	Uncooled micro bolometer
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Spectral Response	8 to 14 μm
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Streaming Video	RTSP
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Resolution	384x288
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Fame Rate	30 FPS
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Compression	H.264, MPEG-4
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Field of View	Horizontal: 60° Vertical: 50°
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Lens Mount Type	Screw Mount
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Focal Distance	7 to 19 mm (support for lens of different focal length)
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Mounting	Pole mountable
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