

640 Uncooled Infrared Camera

VIM-JM611A1C

Datasheet

V1.0 May 2025

640 Uncooled Infrared Camera

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1 Description

This infrared camera adopts an uncooled vanadium oxide infrared focal plane detector, which is applicable for long-wave infrared (8 μ m-14 μ m) radiation imaging. The camera is featured in compact and lightweight, with low power consumption. It can be matched with different infrared lenses, and supports most of the CVBS video output interfaces on market. It is widely used for infrared thermal imaging acquisition in industrial acquisition, observation equipment, drones and other fields.

2 Camera Specifications

Detector	Sensor type	Vanadium oxide (VOx)
	Resolution	640 x512
	Pixel size	12μm
	Response band	8~14 μm
	NETD (noise equivalent temperature difference)	≤40 mK
	Frame Rate	50Hz
Image processing	Defective pixel correction	Compatible
	Image detail enhancement	Compatible
	Image denoising	Compatible
	AGC mode	Histogram
	Boot Time	≤5s
	Pseudocolor mode	White Heat
	Image calibration	Automatic (with shutter)
Power supply	Power	3.9-18V
	Power consumption	≤0.5W (default)
Interface	Video interface	CVBS (default)
	Output resolution	720 × 576 (CVBS)
Environmental parameter	Operating temperature	-40°C to +60°C
	Storage temperature	-50°C to +70°C
	Storage humidity	< 90% RH
	Vibration shock	Vibration: sinusoidal vibration, 10m/s ² , 3-axis Shock: half sine wave, 15g/11ms, 3 axes and 6 directions.
Structural physical parameters	Weight	≤63g
	Dimensions (excluding lens)	27mmx32mmx47.6mm

3 Pin information

3.1 Pin Diagram

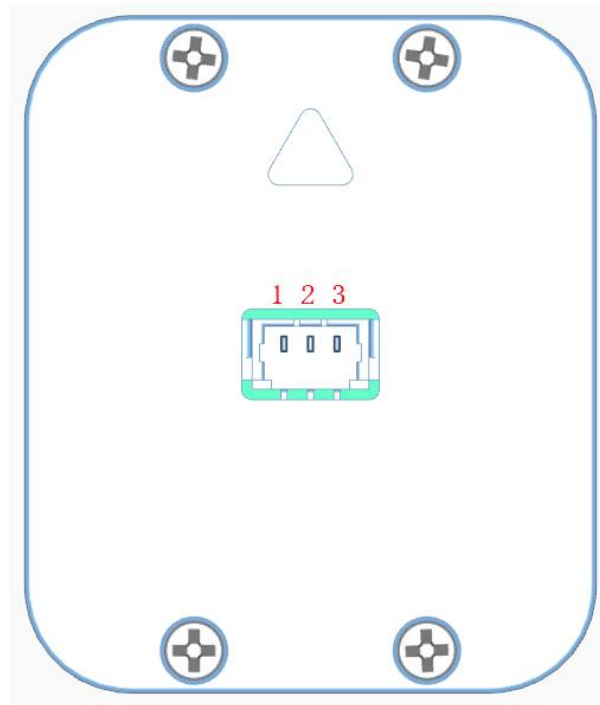


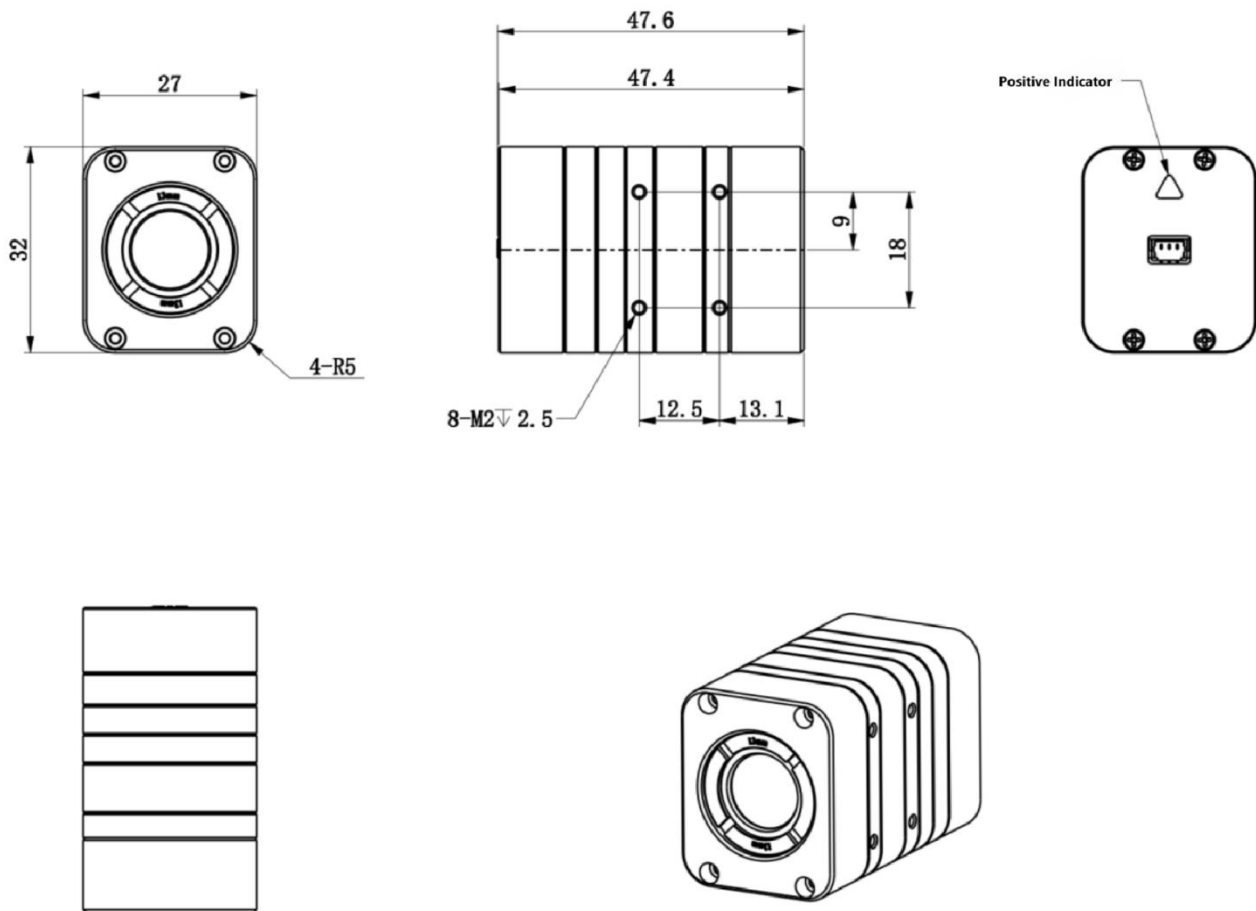
Figure 3- 1 Pin diagram

3.2 Pin Description

Table 3- 1 Pin description

NO	Name	Type	Description
1	VIN	POWER	Positive pole of power supply, range: 3.9~18V
2	GND	POWER	Negative pole of power supply
3	CVBS	OUT	Analog video output

4 Dimensions



Revision History

Version	Date	Description
1.0	May. 2025	Initial

Document Description

Due to product version upgrades or other reasons, the contents of this document may be updated.

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