

# Temperature Measurement Camera Module



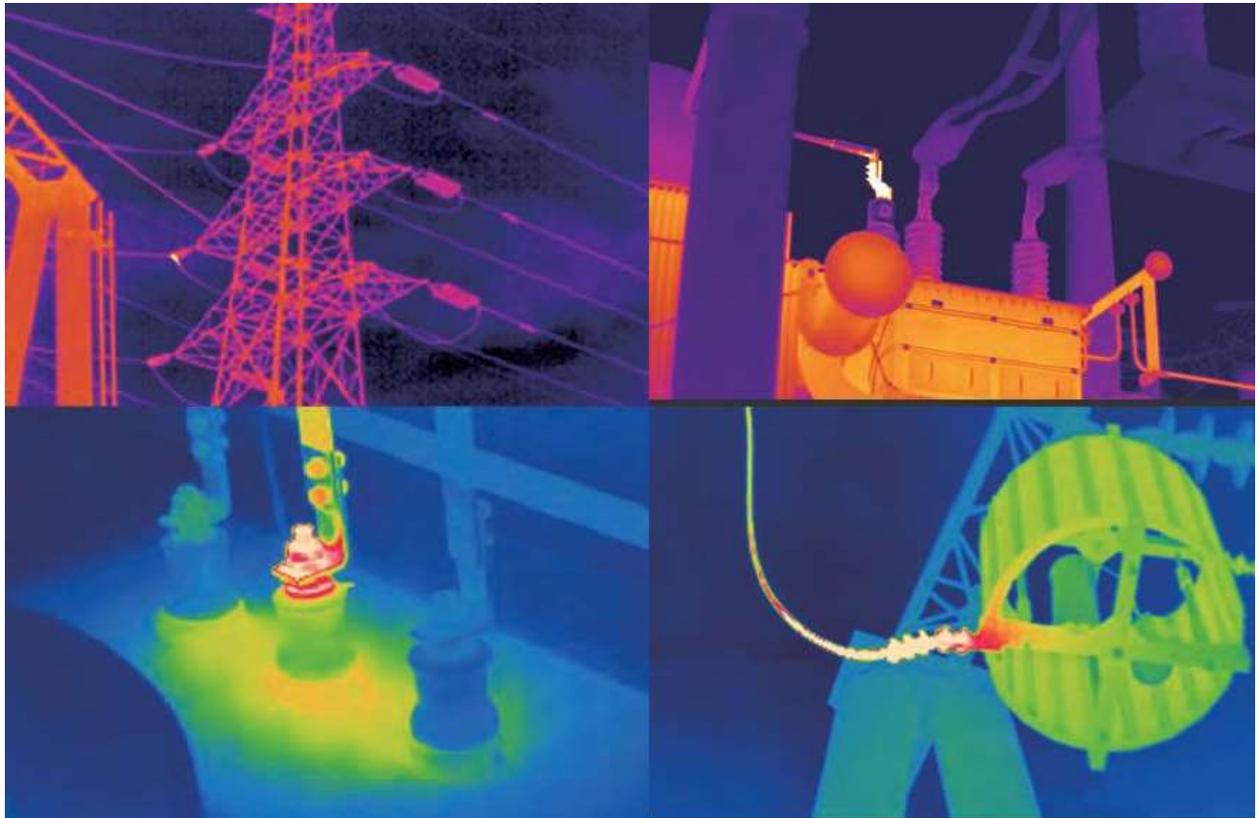
## Feature

- ◆ 640×512/384×288 uncooled vanadium oxide detector;
- ◆ Professional image processing algorithms: NUC, Noise Reduction, DDE, detailed and clear picture;
- ◆ High temperature accuracy in  $\pm 2^{\circ}\text{C}$  or  $\pm 2\%$ ;
- ◆ Small size, light weight, ultra-low power consumption;
- ◆ Convenient for customers' secondary development;
- ◆ Adapt to various industrial application scenarios, support the development of area temperature measurement, isothermal analysis and other functions.

Model		MYK – TCMC 384 X 288	MYK – TCMC 640 X 512
Detector	Detector Type	Uncooled VOx	
	Resolution	384x288	640x512
	Pixel pitch	12 $\mu\text{m}$	
	NETD	$\leq 20\text{mK}$	
	Frame rate	50Hz	
	Spectral range	8~14 $\mu\text{m}$	
Lens	Athermalized fixed focal lens	5mm, 13mm	9mm, 13mm, 25mm, 35mm
Temperature Measurement	Range	-20 $^{\circ}\text{C}$ ~ +150 $^{\circ}\text{C}$ ; +100 $^{\circ}\text{C}$ ~ +550 $^{\circ}\text{C}$	
	Accuracy	$\pm 2^{\circ}\text{C}$ or $\pm 2\%$ (reading range), take the maximum value	
	Modes	Center point, highest / lowest temperature, support for removable points, regional temperature measurement, isothermal analysis function development	
	Temperature Correction	Distance temperature correction, Emissivity correction, Humidity correction	
Thermal imaging operations	Brightness / Gain Adjustment	Manual and automatic / Gain; auto brightness / manual gain; auto brightness / gain	
	Image Enhancement	Digital Detail Enhancement (DDE)	
	Polarity Switch	Support	
	Digital zoom	1.0 ~ 4.0X	1.0 ~ 8.0X
	Calibration	Manual calibration, automatic calibration at power on	
	Noise Reduction	Yes	
Interface Content	Interface Content	Power supply, analog video, 16bit digital video, reserved user IO	
	Analog Video Output	1 channel PAL or 1 channel NTSC	

<b>Interface</b>	Digital Video Output	LVC MOS (16bit YUV422, support BT656), MIPI (expandable), USB Type-C (expansion board)	LVC MOS (16bit YUV422, support BT656), USB Type-C (expansion board, USB3.0), SDI (HD-SDI 1920x1080@30, implemented by expansion board)
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	Control	UART (TTL 3.3V)	
<b>Power System</b>	External power supply	DC5V	
	Power Consumption	≤0.8W	≤1W (without expansion board)
<b>Environmental</b>	Working Temp.	-20°C ~ +60°C	
	Storage Temp.	-45°C ~ +75°C	
<b>Physical</b>	Weight	22g (without lens)	
	Dimension	26×26mm (without lens)	



**Lens for Optional**

Focal Length	FOV	Vehicle (2.3*2.3m)		Module	
		Detection	Recognition	Dimension(WxHxD)	Weight
9mm	46.2°x37.7°	600m	200m	26x26x35mm	40.6g
13mm	32.9°x26.6°	800m	300m	26x26x38mm	43.3g
25mm	17.5°x14.0°	1500m	500m	32x32x49mm	66.1g
35mm	12.5°x10°	2400m	800m	45x45x61mm	88.6g