

MYK – TMCM 640 X 512 / 384 X 288 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 – TMCM 384 X 288	MYK – TMCM 640 X 512
Detector	Detector Type	Uncooled VOx	
	Resolution	384x288	640x512
	Pixel pitch	12μm	
	NETD	≤20mK	
	Frame rate	50Hz	
	Spectral range	8~14μm	
Lens	Athermalized fixed focal lens	5mm, 13mm	9mm, 13mm, 25mm, 35mm
Temperature Measurement	Range	-20℃~+150℃; +100℃~+550℃	
	Accuracy	±2℃ or ±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	Power supply, analog video, 16bit digital video, reserved user IO	
	Analog Video Output	1 channel PAL or 1 channel NTSC	
Interface	Digital Video Output	LVCMOS (16bit YUV422, support BT656), MIPI (expandable), USB Type-C (expansion board)	LVCMOS (16bit YUV422, support BT656), USB Type-C (expansion board, USB3.0), SDI (HD-SDI 1920x1080@30, implemented by expansion board)
Power System	Control	UART (TTL 3.3V)	
	External power supply	DC5V	
	Power Consumption	≤0.8W	≤1W (without expansion board)

Environmental	Working Temp.	-20℃ ～+60℃
	Storage Temp.	-45℃ ～+75℃
Physical	Weight	22g （without lens）
	Dimension	26×26mm （without lens）



Lens for Optional

		Vehicle (2.3*2.3m)		Module	
Focal Length	FOV	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