



Vanadium Oxide (VOx) Microcalorimeter

FPV Thermal Imaging Camera

FS256

256 × 192R

×1, ×2, ×4, ×8

KEY FEATURES

- High Sensitivity Detector: Vanadium Oxide Non Cooled Detector, Supporting 256 x 192 Resolution
- Signal Output: Support Analog Signal Output
- Calibration & Correction: Support Automatic, Manual Calibration, And Background Correction
- Compact Design: Compact Design for Easy Integration
- Overview: The thermal imaging module is a miniaturized integrated product characterized by small size and low power consumption.



APPLICATIONS

- Integration of Drone Pods, Intelligent Equipment, Such As Robotic Gimbals, Individual Helmets, Pods, etc.

TECHNICAL INDICATORS INTRODUCTION TO THE RESOLUTION OF INFRARED THERMAL IMAGERS





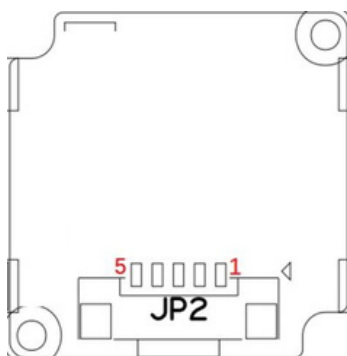
TECHNICAL INDICATORS

Thermal Imaging	
Sensor Type	Vanadium Oxide (VOx) Microcalorimeter
Resolution	256 × 192
Pixel Pitch	12μm
Response Band	8~14 μm
NETD	≤50 mK(@25 °C,F#1.0)
Lens Parameters	9.7 mm
FOV (H*V)	18.1°(H) ×13.6°(V), 22.6°(D)
Minimum Focusing Distance	2m
Max Aperture Value	F1.0
Mage Display	
Output Resolution	256 × 192
Electronic Amplification	×1, ×2, ×4, ×8
Electronic Amplification	Support
Bad Point Correction	Support
Image	Off, Vertical, Horizontal, Center
Image Detail Enhancement	Support
AGC Mode	Histogram
Brightness Adjustment	Support
Pseudo Color Mode	Supports 15 modes including White Heat, Black Heat, Fusion 1, Rainbow, Fusion 2, Iron Red 1, Iron Red 2, etc
Contrast Adjustment	Support
System Function	
Interface	CVBS
System Parameter	
Storage Temperature	-45 °C ~ + 75 °C
Storage Humidity	<90% RH
Vibration Shock	Vibration: Sinusoidal Vibration, 10m/s ² , 3-axis Shock: Half Sine Wave, 15g/11ms, 3-axis 6-way
Working Temperature	-40°C~80°C
Weight	≤23g
Size	≤221mm×21mm×39mm
Power	≤0.8 W
Power Input	DC 5V-17V



INTERFACE DEFINITION

Interface Board Diagram:



Pin Definition:

1	POWER	DC 5~16V Power supply
2	GND	GND
3	CVBS	CVBS
4	UART_TXD	Module UART Sending 3.3V
5	UART_RXD	Module UART Reception 3.3V

CONNECTOR PARAMETERS

POLES	PN	A	B	C
2	1.25T-1-LT-2A插座	1.25	4.25	7.55
3	1.25T-1-LT-3A插座	2.50	5.50	8.80
4	1.25T-1-LT-4A插座	3.75	6.75	10.05
5	1.25T-1-LT-5A插座	5.00	8.00	11.30
6	1.25T-1-LT-6A插座	6.25	9.25	12.55
7	1.25T-1-LT-7A插座	7.50	10.50	13.80
8	1.25T-1-LT-8A插座	8.75	11.75	15.05
9	1.25T-1-LT-9A插座	10.00	13.00	16.30
10	1.25T-1-LT-10A插座	11.25	14.25	17.55
11	1.25T-1-LT-11A插座	12.50	15.50	18.80
12	1.25T-1-LT-12A插座	13.75	16.75	20.05
13	1.25T-1-LT-13A插座	15.00	18.00	21.30
14	1.25T-1-LT-14A插座	16.25	19.25	22.55
14	1.25T-1-LT-14A插座	16.25	19.25	22.55
15	1.25T-1-LT-15A插座	17.50	20.50	23.80
16	1.25T-1-LT-16A插座	18.75	21.75	25.05

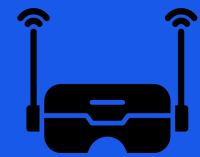
Technical drawings showing dimensions for the connector: C#0.3, 4.5±0.2, 3.3±0.2, 1.25±0.05, A#0.15, 0.3±0.05, B#0.25, 0.6±0.1, 2.1±0.1, 1.5±0.1, 1.25±0.05, 0.8±0.1, A#0.1, 4.75±0.2, 0.5, 4.35±0.2, 0.8±0.1, 1.75, 0.6±0.2, 0.8±0.1, 2.1±0.1, 1.5±0.1, 1.25±0.05, 0.8±0.1.

技术参数 (SPECIFICATIONS)

- 额定电压: 125V AC DC
- Voltage rating: 125V AC DC
- 额定电流: 1.0A AC DC(2AWG)
- Current rating: 1.0A AC DC(2AWG)
- 额定电压: 1.0A AC DC(2AWG)
- Current rating: 1.0A AC DC(2AWG)
- 额定电压: 250V AC(Home)
- Withstand voltage: 250V AC(home)
- 绝缘电阻: 100MΩ MIN
- Insulation resistance: 100MΩ MIN
- 接触电阻: 0.02Ω MAX(初始)
- Contact resistance: 0.02Ω MAX(initial)
- 工作温度: -40°C~+85°C
- Working Temperature: -40°C~+85°C
- 间距: 1.25 mm
- Pitch: 1.25 mm

材料 (MATERIAL)

- 绝缘体: 尼龙 UL94V-0
- Insulator: PA6T UL94V-0
- 接触片: 磷青铜镀锡
- Contact PIN: Phosphor bronze TIN-Plating
- 焊片: 磷青铜镀锡
- Solder tab: Phosphor bronze TIN-Plating
- 端子: 镀锡
- CAP: PA



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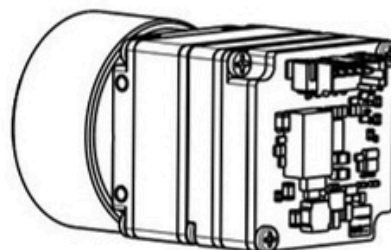
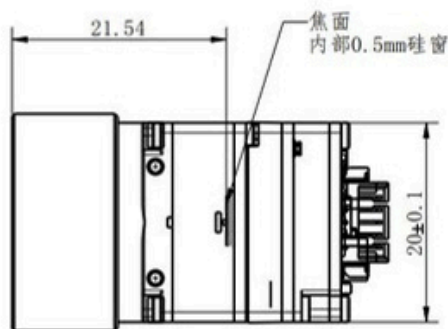
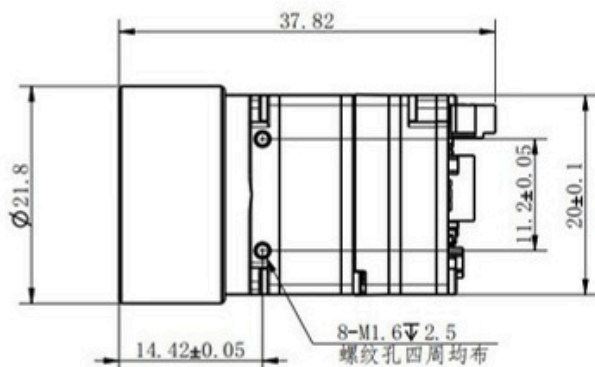
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FS256

256 × 192R

×1, ×2, ×4, ×8

STRUCTURE SIZE: ≤39mm×20mm×20mm



DISCLAIMER



This product is intended for civilian and commercial use only. It is strictly prohibited from being used for any military purposes or activities.