TIMO120 Miniature Uncooled Thermal Module

Thermal Imaging Application in Consumer Electronics Market

Thermography Outdoors Intelligent Security AIoT
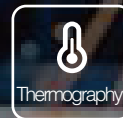
Description

TIMO120 thermal module integrates 120×90 wafer-level package infrared detector, wafer-level optical lens, micro solenoid valve shutter and supports 50°/90° field of view. It can achieve accurate temperature data, heat distribution and is easy to be integrated into mobile terminals or smart devices that have strict requirements on cost, size and weight.

Low Cost & Fast Integration

- Minimum WLP infrared module; size 8.5mm×8.5mm×9.16mm
- DVP Interface, compatible with various embedded platforms
- Visible camera module equivalent for directly integration
- Provide software development kit

Long Operating Time

- Ultra-low power consumption, as low as 10mW

Model	TIMO120
Performance	
Sensitive Material	Vanadium Oxide
Resolution	120×90
Pixel Size	17μm
Spectral Range	8μm ~14μm
FOV	50°±1°/ 90°±5°
NETD	≤60mK
Frame Rate	25Hz (Customizable 1 ~ 30Hz)
Focusing Mode	Free
Measurement & Analysis	
Temperature Measurement Range	① Industrial Thermography: -20℃ ~ 150℃, 100℃ ~ 400℃ (Auto Shift) ② Body Temperature Screening: 20℃ ~ 50℃ (Accurate Range: 28 ~ 40℃)
Temperature Measurement Accuracy	① Industrial Thermography: Greater of ±2℃ or ±2% ② Body Temperature Screening: ±0.5℃
External Interface	34PIN (FOV: 50°) 40PIN (FOV: 90°)
Typical Power Consumption	45mW@25Hz, 16mW@9Hz, 10mW@ ≤4Hz
SDK	Android/ Linux/ Windows
Environmental Specifications	
Storage Temperature	-40℃~85℃
Certificate	RoHS
Physical Characteristics	
Weight	≤ 2g
Size (mm)	8.5×8.5×9.16 (FOV: 50°) 12×10×5.58 (FOV: 90°)

Specifications are subject to change without prior notice.