

IPT430M

Mini Online Thermal
Camera Core

50Hz High Frame Rate for Accurate Temperature Measurement



5.9mm



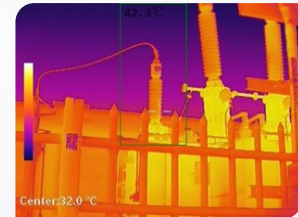
10.5mm



19mm

Introduction

IPT430M is an integrated Thermal Camera Core of small size, light weight and low power consumption. It uses 384×288@12μm uncooled infrared focal plane detector with 5.9/10.5/19mm electric focusing lenses to achieve rapid focusing in 1s, fast output of high-definition infrared thermal image and intuitive display of target temperature distribution. In the scene where the target moves at a high speed or quick temperature variation occurs, it supports a high frame rate of 50Hz, which records smoother infrared videos and fast obtain more comprehensive and accurate temperature data.



Features and Benefits

- o **High frame rate:** 50Hz thermal camera, captures rapid temperature changes smoothly.
- o **Excellent imaging performance:** 384×288 infrared detector with 3 electric focusing lenses for clear thermal images in just 1s.
- o **Real-time temperature measurement:** Small and compact with “temperature measurement + IP network”
- o **Multiple temperature measurement modes:** Supports high/low temperature tracking, up to 21 targets with independent alarm threshold.
- o **Easy management and control:** Feature-rich WEB service software for direct monitor access and device configuration.
- o **Easy integration:** Offers user-friendly Demo/API/SDK for seamless integration and faster development.

Applications

Being integrated to patrol robot and safety supervision products, it can be applied to indoor and outdoor temperature monitoring in small and medium ranges in substations and iron and steel industry as well as the intelligent manufacturing processes including food/packaging/automobile/papermaking/semiconductor.

Specifications

Product model	IPT430M	
Thermographic		
Detector type	VOx, 8μm to 14μm	
IR resolution	384×288, 12μm	
NETD	≤ 50mK@30°C	
Lens	5.9mm, 46.0°×34.1°; 10.5mm, 25.4°×19.0°; 19mm, 13.8°×10.4°	
Focusing mode	Electric/Automatic	
Pseudo colors	21 pseudo colors	
Featured features	Detail enhancement, 2D/3D noise reduction, Image flip	
Temperature measurement		
Measurement range	5.9mm/10.5mm: -20°C~150°C, 100°C~350°C; -20°C~150°C, 100°C~550°C (Alternative) 19mm: -20°C~150°C, 100°C~350°C; -20°C~150°C, 100°C~650°C (Alternative)	
Measurement accuracy	±2°C or ±2% (whichever is greater)	
Target setting	Up to 21 targets (Point, linear and area temperature measuring, and the area shape can be circle, square and irregular polygon)	
Measurement function	Cold/hot spot tracking, Full-screen point temperature measuring, Query and export of information	
Image		
Video compression	H.264	
Image format	JPEG	
Code stream	384×288@50Hz	
Protocol and storage		
Network protocol	TCP/IP, IPV4, HTTP, RTSP, DHCP, ONVIF, MODBUS	
SDK/API	Open SDK/API for software integration	
Local storage	16G EMMC	
System function		
Language version	Chinese/English	
Browser	Supported	
User management	Max. 20 users with multi-level user permission management	
Fault detection	Network disconnection, IP conflict, Illegal access, storage exception	
Hardware interface		
Power interface	DC12V±25%	
Network interface	One RJ45 (100M/1, 000M) Ethernet port	
Alarm interface	1 output	
Other interfaces	1-channel RS485	
Environmental		
Working temperature	-25°C to + 60°C	
Working humidity	≤ 95%, non-condensing	
Certification	CE/EMC/RoHS /CNAS	
Physical		
Power consumption	≤2.8W	
Size	5.9mm: ≤78×44×42mm; 10.5mm: ≤81×44×42mm; 19mm: ≤80×44×42mm (lens included)	
Net weight	≤ 195g (lens included)	

