

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
Detector resolution	384×288
Pixel size	12μm
Wavelength range	8μm to 14μm
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	20 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	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
Network interface	One RJ45 (100M/ 1, 000M) Ethernet port
Alarm interface	1 input and 1 output
Other interfaces	1-channel RS485
Environmental	
Working temperature	-25°C to + 60°C
Working humidity	≤ 95%, non-condensing
Certification	CNAS/ CE/ EMC/ RoHS
Physical	
Power consumption	≤ 2.4W
Size	5.9mm: ≤78×44×42mm; 10.5mm: ≤81×44×42mm; 19mm: ≤80×44×42mm (lens included)
Net weight	≤ 195g (lens included)

