TN460U

Ultra-high Temperature Thermal Camera

TN460U is a non-contact infrared thermal camera specially designed for ultra-high temperature measurement needs. It adopts an uncooled infrared FPA detector, featuring a high resolution of 640×512 and an ultra-wide temperature measurement range of 0~2000°C. It features in compact and lightweight design, optional air-cooled/water-cooled shell, and a maximum tolerable ambient temperature of 220°C. A variety of lenses are available to provide clear and accurate infrared images and temperature measurement functions. Adopting open network protocols, it facilitates integration and secondary development for customers to improve system flexibility.

Product Highlights

High Infrared Resolution

- A new generation of 12μm infrared thermal imaging detector with 640×512 infrared resolution
- Integrated with leading infrared image algorithms, providing higher definition and more delicate images

Ultra-High Temperature Accurate Temperature Measurement

- An ultra-wide measurement range of 0~2000°C, specially designed for high-temperature scenarios
- Synchronous output of 25Hz image and temperature data, consistent and stable high-temperature monitoring

Refined Industrial Design, Easy Deployment

- Compact and lightweight design, unlimited integrated deployment
- Optional air-cooled/water-cooled shells to meet the needs of harsh industrial sites
- Three optional lenses, flexibly adaptive to a variety of application scenarios
- Open network protocol, facilitating integration and secondary development for customers

Specifications

Model	TN460U		
Thermal Imaging Parameters			
Detector	Uncooled VOx detector		
Infrared Resolution	640×512		
Pixel Pitch	12μm		
Frame Rate	25Hz		
Spectral Band	7.5μm~14μm		
Thermal Sensitivity (NETD)	≤40mK(@25°C,F#1.0,25Hz)		
Focal Length	4.1mm	6.9mm	19mm
Focus Mode	Fixed focus, athermalized		
FOV	100°×82°	62.9°×50.4°	22.9°×18.4°
Spatial Resolution	2.927mrad	1.74mrad	0.632mrad
F Value	3.0	3.5	3.5
Temperature Measurement			
Measurement Range	0°C~800°C, 600~2000°C		
Measurement Accuracy	±2°C or ±2% of readings (whichever is greater)		
Temperature Measurement Correction	Reflected temperature, ambient temperature, atmospheric transmissivity, object emissivity, distance		
Measurement Tool	Temperature measurement of 12 points, 12 lines, and 12 areas, supporting isotherm settings and temperature alarm		
Palette	20 palettes such as iron-red, black & white, and rainbow		
Image Processing	Temperature width stretch, non-uniformity correction, thermal image capture, digital zoom (1-8)		
System Interface			
Communication Interface	RJ45, 10M/100M adaptive Ethernet port		
	1-channel RS485, supporting Pelco-D protocol expansion		
Audio Interface	1-channel audio input, 1-channel audio output		
Alarm Interface	1-channel alarm input, 1-channel alarm output		
Video Interface	1-channel analog video		
Video Standards	H.264, H.265		
Audio Standards	G.711a/G .711u/AAC/PCM		
Storage Interface	SD card		
Network Protocol	IPv4, HTTP, HTTPS, SMTP, FTP, UPnP, DNS, DDNS, NTP, RTCP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP		
Interface Protocol	Modbus TCP, ONVIF, GB28181, MQTT		
Device Specifications			
Operating Temperature	-20°C~60°C		
Power Supply Mode	12V DC or PoE power supply		
Typical Power Consumption	＜2.5W		
Dimensions	＜50×50×90mm		
Weight	About 200g		

Applications

Metallurgy

Glass

Casting

Coal Chemicals

Raythink Technology Co., Ltd.

Company Address: No.5 Wanshoushan Road, Fulaishan Street, Yantai Area of China (Shandong) Pilot Free Trade Zone
Postal Code: 264000 Official Website: http://www.raythink-tech.com Service Email: sales@raythink-tech.com