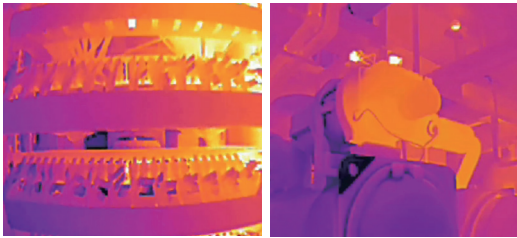




# TN220

## Thermographic Cube Camera

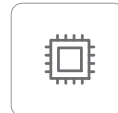
TN220 is developed based on the 256×192 WLP infrared module, providing users with high-quality images. It features a compact design with POE power supply support and flexible mounting options, including magnetic installation, ensuring simple and convenient wiring. This device offers a visualized temperature monitoring solution for confined spaces and close-distance applications in fields such as electricity, renewable energy, and industrial manufacturing.



### Product Highlights

#### Clear Images and Precise Temperature Measurement

- 256×192 infrared resolution, providing excellent imaging quality for customers
- Support switching of 20 palette effects, applicable for a variety of scenarios
- Support 1~25Hz adjustable frame rate, with synchronous and real-time image thermal image
- Both 90° and 56° FOV specifications available



#### High IP Grade and Durable

- High IP grade of IP67 for temperature monitoring in harsh environments
- Operating temperature range of -20°C~+60°C, enhancing the temperature adaptability in confined spaces
- PC and Aluminum alloy shell, solid and durable



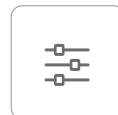
#### Intelligent Algorithms and Professional Software

- Support recognition algorithms for smoke and fire monitoring and regional intrusion to offer dual security guarantees
- Support thermal image capture and historical data record, making data analysis more efficient and convenient
- Support protocols such as MQTT, Modbus TCP/RTU, ONVIF and GB28181 to help integrate system solutions
- Provide SDK and development support to assist users for secondary development



#### Simple Mounting and Cost Reduction

- Easy mounting via various options such as magnetic mounting, wall mounting, vertical mounting, tripod mounting
- Single aviation design, POE power supply, enable users to measure temperature at a low cost
- Reserve the RS485 interface and IO alarm interface for alarm linkage



## Specifications

Thermal Imaging Parameters			
Detector Type	VOx Uncooled FPA Detector		
Spectral Band	7.5~14μm		
NETD	≤40mK(@25°C, F#1.0,25Hz)		
Resolution	256×192		
Frame Rate	1-25Hz, adjustable		
Pixel Pitch	12μm		
Focal Length	3.2mm		2mm
Focus Mode	Athermalized Prime Lenses		
FOV	56°×42°		90°×65.1°
Palette	20 palettes available in total, such as black-hot/white-hot/rainbow		
Dual-Spectral Parameters			
Visible Light Resolution	1600×1200		
Light Filling	Support		
Dual-Spectrum Fusion	Support		
Network Function			
Network Protocol	IPv4, DHCP, HTTP, HTTPS, RTSP, SMTP, FTP, UPnP		
Interface Protocol	ONVIF, GB28181, Modbus TCP/RTU, MQTT, SDK		
Browser	Support browsers like Google, Firefox, Edge, etc. in Chinese and English		
Video Parameters			
Image Encoding Format	JPEG		
Video Encoding Format	MP4		
Video Compression Standard	H.264/H.265		
Temperature Measurement			
Temperature Measurement Range	-20°C~-150°C, 100°C~550°C		
Measurement Accuracy	±2°C or ±2%		
Temperature Measurement & Analysis	Global, point (12), line (12), area (12) and mask region (12) temperature measurement rules as well as alarm linkage		
Isotherm	Support isotherm setting		
Temperature Width Stretch	Support temperature width stretch display		
Thermal Image Capture	Support thermal image capture and secondary analysis		
Intelligent Analysis			
Intelligent Detection	Support intelligent event analysis such as smoke and fire detection, regional intrusion, tripwire intrusion, passenger and vehicle recognition and target filter		
Abnormal Alarm	Support detection of exceptions such as burn warnings, SD card exception, network cable abnormality and illegal access		
Communication Interface			
Power Supply	DC 10~30V 1A/ POE(802.3af)		
Network Interface	1-channel RJ45, 100M adaptive Ethernet port, support POE power supply		
Alarm Interface	1-channel IO alarm input, 1-channel IO alarm output		
Communication Interface	1-channel RS485 interface		
Storage Interface	32GB Internal Memory		
Others			
Reset Button	Support		
Operating Temperature and Humidity	-20°C~+60°C, <95%RH		
Ingress Protection Rating	IP67		
Power Consumption	≤2.6W		
Dimensions	93mm×56mm×31.5mm		
Weight	152g		

## Applications



Power House



Lithium Battery Storage



Industrial Manufacturing



Data Center

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■ This manual is illustrative only. Technical specifications are subject to change without prior notice.