Raythink
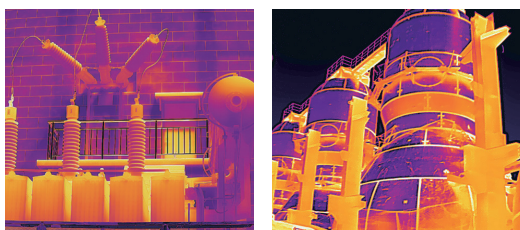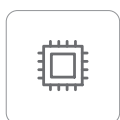
ATR31
Motorized Focusing Thermal Camera

ATR31 is a high-performance and high-accuracy electric-focusing thermal camera with an uncooled infrared FPA detector and multiple lenses choose. The device supports multiple protocols such as RTSP, ONVIF, and GB28181 .Equipping with professional temperature measurement analysis software and SDK that facilitating system integration. Be suitable for temperature monitoring and imaging in electronic circuits, scientific research, industrial automation and other application fields.
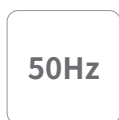
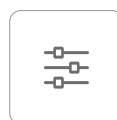## Product Highlights

384×288 infrared resolution	**50Hz** A frame rate of 50Hz	**-20℃~+550℃** Wide measurement range	Gigabit network interface	Electric focusing
Clear images	High-speed data acquisition	Suitable for application in multiple scenarios	Real-time transmission of temperature status	Clear and accurate

Lens Parameters

Model	ATR31				
Focal Length	7.8mm	13mm	15mm	19mm	25mm
FOV	47°×35.6°	29.6°×22°	25°×18.7°	19.6°×14.7	14.8°×11.1°
Spatial Resolution (IFOV)	2.17mrad	1.3mrad	1.1mrad	0.89mrad	0.68mrad

Specifications

Thermal Imaging Parameters

Detector	Uncooled VOx detector
Infrared Resolution	384×288
Pixel Pitch	17μm
Spectral Band	8μm~14μm
Thermal Sensitivity (NETD)	<50mK

Temperature Measurement

Measurement Range	-20℃~+150℃,0℃~550℃
Measurement Accuracy	±2℃ or ±2% of readings
Temperature Measurement Correction	Reflected temperature, ambient temperature, atmospheric transmissivity, object emissivity, distance
Measurement Tool	Settings of measurement rules for a total of 12 points, lines and areas, supporting isotherm setting
Temperature Width Stretch	Support temperature width stretch

Image and Video

Frame Rate	50Hz
Palettes	18 color palettes including black-hot, white-hot, iron red, rainbow, etc.
Video Standards	H.264, H.265
Thermal Image Capture	Support thermal image capture and secondary analysis
Mirroring	Horizontal/Vertical/Diagonal
Digital Zoom	1.0~8.0 continuous zoom (step size: 0.1)

System Interface

Communication Interface	RJ45, supporting Gigabit network and customized RS485 for Pecol-D protocol
Video Interface	1-channel analog video
Alarm Interface	1-channel alarm output (optional)
Network protocol	TCP, UDP, ICMP, DHCP, RTSP
Interface Protocol	ONVIF, GB28181

Device Specifications

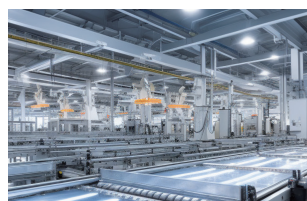|	
Operating Temperature	-20℃~+60℃
Power Supply Mode	10~36V DC, POE
Typical Power Consumption	3W
Dimensions	55mm×55mm×110mm
Weight	About 430g

Applications

Electric Device Routine Inspection

Petrochemical Equipment Monitoring

Automatic Control

Scientific Research and Testing & Evaluation

RayThink Technology Co., Ltd.