

Main Specifications

Model	AT61F	AT31F						
Detector Parameters								
Detector Type	VOx uncooled infrared FPA detector							
Resolution	640×512	384×288						
Pixel Pitch	12μm	17μm						
Spectral Band	8~14μm							
NETD	<50mk @25°C,F1.0(<40mk Optional)							
Frame Rate	50Hz							
Image Adjustment								
Polarity	Black hot/White hot							
Palette	Support 18 palettes							
Temperature Measurement Performance								
Measuring Range	-20°C~+150°C, 0°C~+550°C							
High and low gain mode	High gain mode, low gain mode, and two modes automatic switching							
Temperature Measurement Accuracy	±2°C or ±2% of the reading (the larger one shall prevail) @Environment Temperature -20°C~60°C							
Power								
Power Supply Range	9~26V DC							
Power Protection	reverse connection protection							
Typical Power Consumption @25°C	<3W							
Interface								
Analog Video Output	1 channel video							
Network Interface	RJ45 10M/100M/1000M self-adapted							
Alarm Interface	1 input, 1 output							
Network Protocol	Ethernet/IP, TCP, UDP, SNTP, RTSP, HTTP, ICMP, SMTP, DHCP, UPnP, PPPOE							
Ethernet	Control and transmit images							
Interface Protocol	Support customized ONVIF, GB28181							
Serial Communication Interface	Customizable RS-485, RS-232							
Compression Standard								
Video Compression Standard	H.264/H.265							
Video Format	mp4, mov							
Alarm								
Alarm Function	All temperature measurement points, the highest temperature, lowest temperature and average temperature in all temperature measurement areas can be configured with separate alarm outputs							
Alarm Output	I/O output, log, save image, file sending (FTP), email (SMTP), notification							
Physical Characteristics								
Weight(without lens)	<150g							
Dimension(without lens)	46.5×48×83 (mm)							
Environment Adaptability								
Operating Temperature	-20°C~+60°C							
Storage Temperature	-40°C~+70°C							
Humidity	5~95%, non-condensing							
Secondary Development								
Secondary Development	Provide Windows / Linux SDK and instruction							
Accessories								
Accessories	Interface cable							
Resolution	384×288							
Lens(mm)	4	6.2	9.7	13	19	25	35	50
FOV(H×V)	90.3°×60.7°	61.5°×45.7°	37.9°×28.7°	20.1°×15.1°	19.5°×14.7°	14.9°×11.2°	10.6°×8°	7.4°×5.6°
IFOV	4.250mrad	2.742mrad	1.753mrad	1.308mrad	0.895mrad	0.680mrad	0.486mrad	0.340mrad
Resolution	640×512							
Lens(mm)	4.1	5.8	9.1	13	19	25	35	55
FOV(H×V)	89°×75°	70°×57°	48°×38°	33°×26°	22°×18°	17°×14°	12.5°×10°	8°×6.4°
IFOV	2.92mrad	2.06mrad	1.31mrad	0.92mrad	0.63mrad	0.48mrad	0.34mrad	0.21 mrad

Company Profile

IRay Technology Co., Ltd. concentrates on developing and manufacturing thermal imaging technologies and products, with completely independent intellectual property rights. IRay committed to providing global customers with professional thermal imaging products and solutions. The main products include IRFPA detectors, thermal imaging cores, and terminal products.

With R&D personnel accounts for 47% of all employees, IRay owns 567 patented technologies in multiple fields, such as the development of IC, the design and manufacture of MEMS sensor, and Matrix III image algorithms.

IRay products have been applied in various fields, such as disease control and prevention, industrial temperature measurement, intelligent surveillance, outdoor observation, automatic driving, AI and machine vision.

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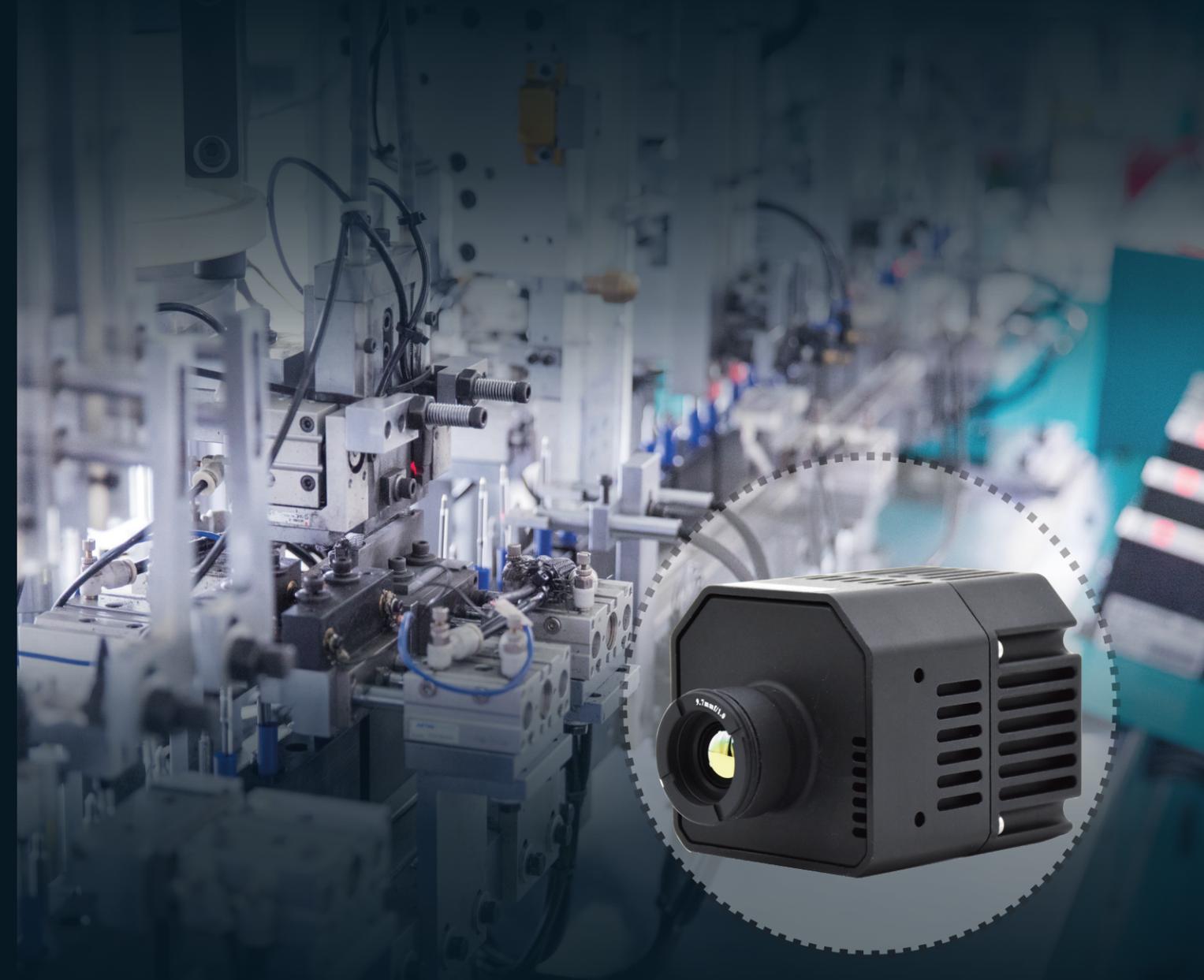
This manual is illustrative only. Technical specifications are subject to change without prior notice.



Website

Authorized IRay Distributor:

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AT Series Fixed Focusing Online Temperature Measurement Thermal Camera

Observe and analyze the thermal world



AT31F/61F

AT31F/61F adopts a high-performance VOx detector with high resolution and high sensitivity. Combined with the Matrix III patented image algorithm, it provides clearer images and more temperature details. Its patented intelligent temperature measurement algorithm makes the results more accurate and reliable. Thanks to its characteristics, such as low power consumption, small size, short start-up time, it is professional, simple, and easy to use with its comprehensive analysis software.

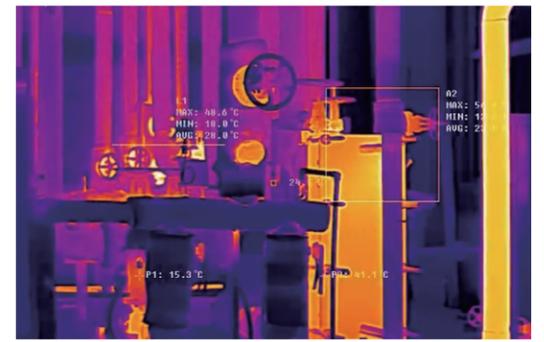


2 Dedicated support, work together to form your exclusive advantage

- Provide Windows/Linux/Android SDK to support users' secondary development and improve practicality to form customer advantages.
- Displaying more point, line, and area test results provides an easier way for obtaining back-end temperature data and makes the application more flexible and convenient, reducing the cost of use.

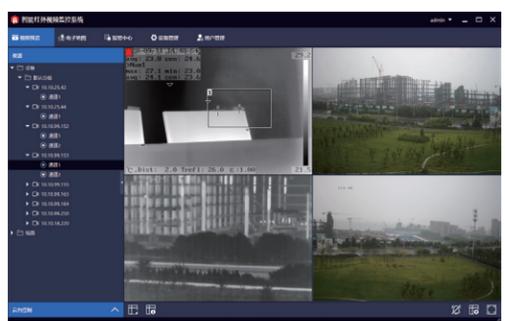


- Support alarm function and provide abnormal alarm (I/O output, log, image storage, file sending (FTP), E-mail (SMTP));



1 Excellent configuration, more usable than ever

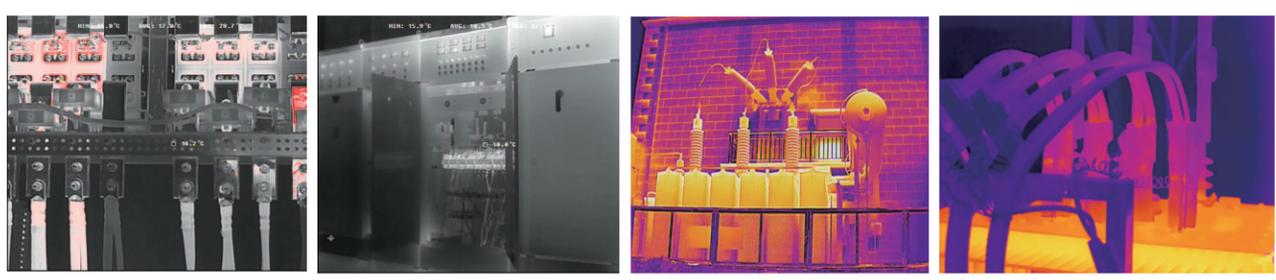
- It is specially optimized for network. One or multiple cameras can be controlled at the same time with our professional PC software, reducing the application cost.



- -20°C~+550°C wide range temperature measurement makes it possible to monitor more industrial targets requiring high-temperature measurement.

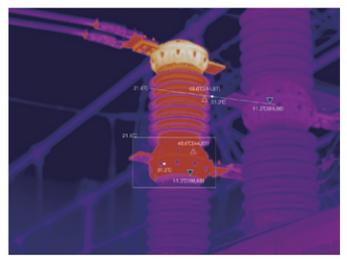


- It provides lenses of various optional focal lengths. It can output high-quality infrared images and meet the detecting requirements for space-restricted areas and small targets.

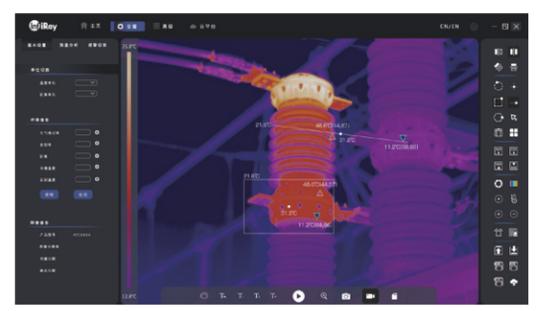


3 Advanced interface, powerful and versatile

- 50Hz frame rate and Gigabit/Mbit/adaptive Ethernet interface support real-time transmission of on-site temperature data.
- Rich back-end interfaces can be directly connected to various monitoring systems for integration programs, greatly reducing the R&D cycle.



- Multiple network protocols, such as TCP, UDP, ICMP, and DHCP, can achieve real-time temperature monitoring and abnormal warning. Compatible with protocols, such as ONVIF and GB28181, it can provide convenience for on-site installation and share analysis and alarm results easily at the same time.



Application Fields

