Main Specifications

Model		AT61F			A	T31F			
Detector Parameters									
Detector Type		VOx uncoole	ed infrared FPA dete	ector					
Resolution		640×512 384×288							
Pixel Pitch		12µm				7μm			
Spectral Band		8~14μm							
NETD		 <50mk @25'	°C.F1.0(<40mK Opti	onal)					
Frame Rate	50Hz								
Image Adjustment									
Polarity		Black hot/W	'hite 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		$\pm 2^{\circ}$ C or $\pm 2^{\circ}$ of the reading (the larger <u>one shall prevail</u>) @Environment Temperature -20^{\circ}C~60^{\circ}C							
Power						·			
Power Supply Range		9∼26V DC							
Power Protection	reverse connection protection								
Typical Power Consumption @25°C	<3W	<3₩							
Interface									
Analog Video Output		1 channel vi	deo						
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	tion Interface Customizable RS-485, RS-232								
Compression Standard									
Video Compression Standard	H.264/H.265								
Video Format	mp4, mov								
Alarm									
Alarm Function	ion			All temperature measurement points, the highest temperature, lowest temperature and average					
Alarm Output	I/O output, l	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°	с						
Storage Temperature	-40°C~+70°C								
Humidity	5~95%, non-condensing								
Software Support			0						
SDK	Provide Windows / Linux SDK and instruction								
PC Software	B/S with browser analysis configuration; C/S with PC&Android temperature analysis software and network monitoring software								
Accessories			, <u>,</u>				Ű		
Accessories		Interface cal	ole						
Resolution			384	×288					
			12	10	25	35	50		
Lens(mm) 4	6.2	9.7	13	19	25				
Lens(mm) 4 FOV(H×V) 90.3°×60.7°	6.2 61.5°×45.7°	9.7 37.9°×28.7°	20.1°×15.1°	19 19.5°×14.7°	14.9°×11.2°	10.6°×8°	7.4°×5.6°		
Lens(mm) 4 FOV(H×V) 90.3°×60.7° IFOV 4.250mrad	6.2 61.5°×45.7° 2.742mrad	9.7 37.9°×28.7° 1.753mrad	20.1°×15.1° 1.308mrad	19.5°×14.7° 0.895mrad	14.9°×11.2° 0.680mrad	10.6°×8° 0.486mrad	7.4°×5.6° 0.340mrad		
Lens(mm) 4 FOV(H×V) 90.3°×60.7° IFOV 4.250mrad Resolution	6.2 61.5°×45.7° 2.742mrad	9.7 37.9°×28.7° 1.753mrad 9.1	15 20.1°×15.1° 1.308mrad 6402	19.5°×14.7° 0.895mrad ×512	14.9°×11.2° 0.680mrad	35 10.6°×8° 0.486mrad	7.4°×5.6° 0.340mrad		
Lens(mm) 4 FOV(H×V) 90.3°×60.7° IFOV 4.250mrad Resolution Lens(mm) 4.1 FOV(H×V) 89°×75°	6.2 61.5°×45.7° 2.742mrad 5.8 70°×57°	9.7 37.9°×28.7° 1.753mrad 9.1 48°×38°	13 20.1°×15.1° 1.308mrad 6402 13 33°×26°	19.5°×14.7° 0.895mrad ×512 19 22°×18°	14.9°×11.2° 0.680mrad 25 17°×14°	35 10.6°×8° 0.486mrad 35 12.5°×10°	55 7.4°×5.6° 0.340mrad 55 8°×6.4°		

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.



IRay Technology Co., Ltd.

Tel:400-998-3088 Fax:+86-535-3410604 Add:11th Guiyang St., Yantai, Shandong, P.R.China Website:www.infiray.com E-mail: sales@iraytek.com This manual is illustrative only. Technical specifications are subject to change without prior notice.

Sample No.: DY2020Y002-ATF Printing time: Nov. 2020

Authorized IRay Distributor:





AT Series Fixed Focusing Online

Observe and analyze the thermal world

Temperature Measurement Thermal Camera

AT31F/61F adopts a high-performance VOx detector with high resolution and high sensitiv-ity. Combined with the Matrix III patented ity. Combined with the Matrix III patented image algorithm, it provides clearer images and more temperature details. Its patented intelligent temperature measurement algo-rithm 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 accurate analysis easy to use with its comprehensive analysis software.

(InfiRay

Excellent configuration, L 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.



• 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.



• -20°C~+550°C wide range temperature measurement

makes it possible to monitor more industrial targets



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));

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.



Application Fields



Quality test

Industrial process control

Equipment condition monitoring





• 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.









Fire warning

R&D test and evaluation