

SIFT640

Online Ultra-High Temperature Thermal Camera

The **SIFT640** is a non-contact infrared thermal camera designed for ultra-high temperature measurement applications. It uses an uncooled infrared FPA detector and delivers high-definition imaging with a resolution of **640x512**, covering an ultra-wide temperature range of **0–2000°C**.

Featuring a compact, lightweight design, it supports optional **air-cooled or water-cooled housings** and can withstand ambient temperatures of up to **220°C**. A selection of lenses ensures clear, precise infrared imaging and accurate temperature measurement. With support for **open network protocols**, the **SIFT640** enables seamless integration and secondary development, enhancing system flexibility for customers.



Air-Cooled/
Water-Cooled Shell

Key Features:

HD Infrared Resolution

- A new generation of 12µm infrared thermal imaging detector with 640x512 infrared resolution
- Integrated with leading infrared image algorithms, providing higher definition and more delicate images

Ultra-High Temperature Accurate Temperature Measurement

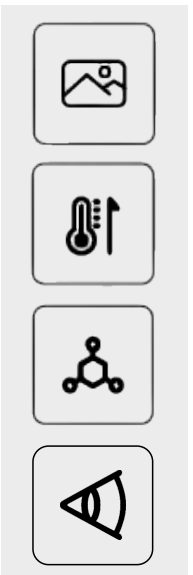
- An ultra-wide measurement range of 0~2000°C, specially designed for high-temperature scenarios
- Synchronous output of 25Hz image and temperature data, consistent and stable high-temperature monitoring

Refined Industrial Design, Easy Deployment

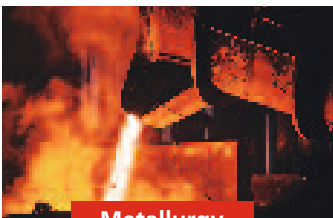
- Compact and lightweight design, unlimited integrated deployment
- Optional air-cooled/water-cooled shells to meet the needs of harsh industrial sites
- Open network protocol, facilitating integration and secondary development for customers

Available Lens Variants:

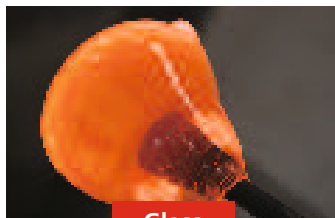
- 4.1 mm Lens – Ultra-wide FOV (100° × 82°), Wide-area, close-range monitoring
- 6.9 mm Lens – Standard FOV (62.9° × 50.4°), Balanced, general-purpose monitoring
- 19 mm Lens – Narrow FOV (22.9° × 18.4°), Long-range, high-precision monitoring



Applications:



Metallurgy



Glass



Casting



Coal Chemicals

Technical Specifications:

Model	SIFT640		
Thermal Imaging Parameters			
Detector	Uncooled VOx detector		
Infrared Resolution	640x512		
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°x82°	62.9°x50.4°	22.9°x18.4°
Spatial Resolution	2.927mrad	1.74mrad	0.632mrad
F Value	3.0	2.5	2.5
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, 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 (HxWxD)	<50x50x90mm		
Weight	About 200g		