



IR - 9T

Dual spectrum High-Definition IR Payload

Details



智轻光电
ZHIQING PHOTOELECTRIC

Phone number: +86 198 6182 0181

Whatsapp: +86 198 6182 0181

Address: 2000 ShunHua Street, Jinan's Free Trade Zone,
ShunTai Plaza building 7, 6th Floor #3rd room Southern Area
People Republic of China, ShanDong Province, Jinan City.

Compound series IR9T

Dual-spectrum infrared intelligent payload



IR9T Introduction

Compound: IR9T dual-spectrum infrared intelligent payload, uses a fully enclosed body structure design, equipped with a **640x512** thermal imaging system and an 8Mpx zoom camera with a 10x optical zoom. Its built-in intelligent SoC can perform the traditional infrared temperature reading and apply a IR temperature filter to the image.

Day and night inspection

By integrating the drone's flight points to the UAV is capable of performing autonomous IR inspections even during night-time.

Advantages

The IR9T was designed to simplify the inspection process, since it uses cutting-edge technology and advanced calculations to provide an already processed result, improving the efficiency of every inspection.



1. IR 640 × 512 : temperature measurement infrared camera.
2. EO camera 8MP 10x optical zoom.
3. X-Port Gimbal.

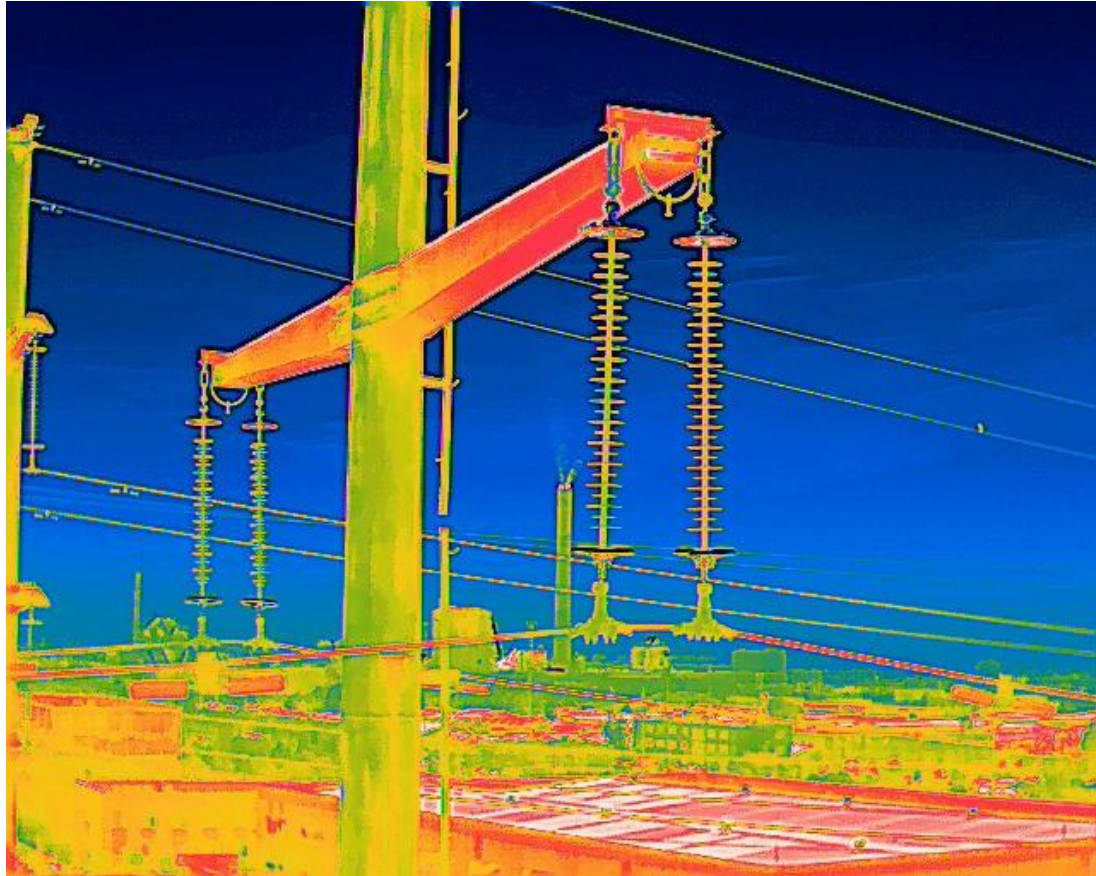
Characteristics

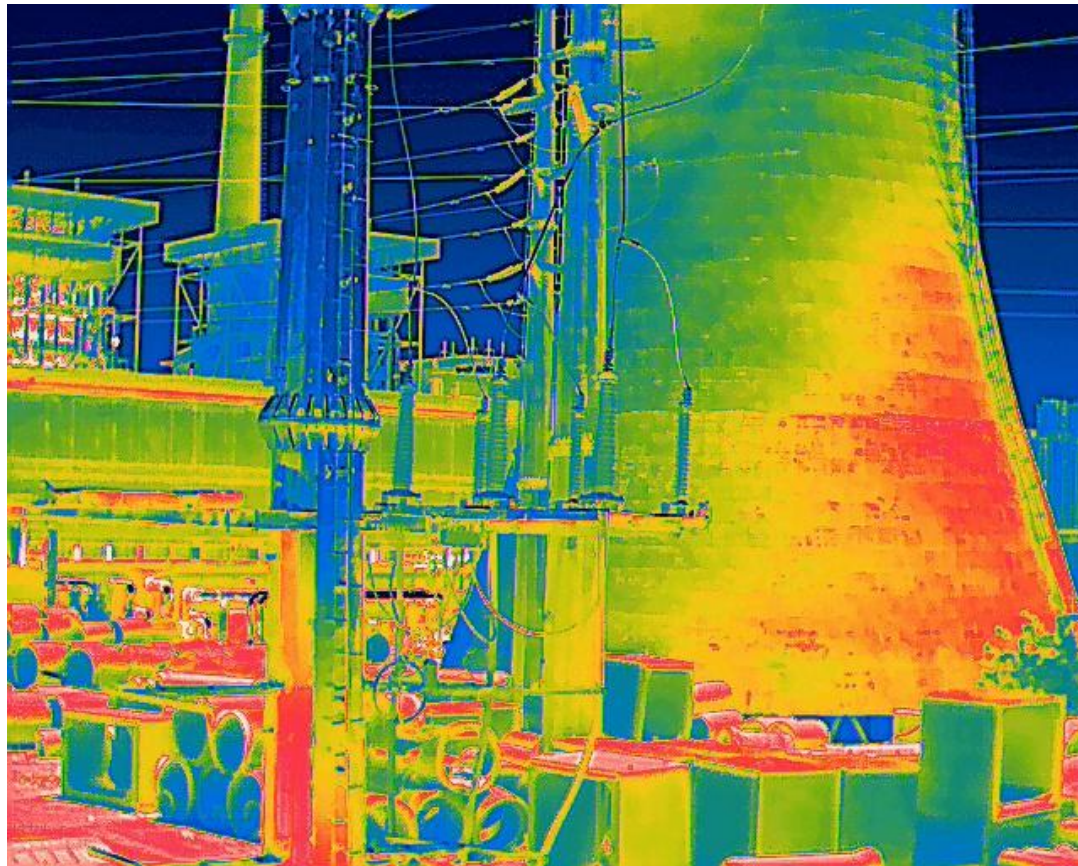
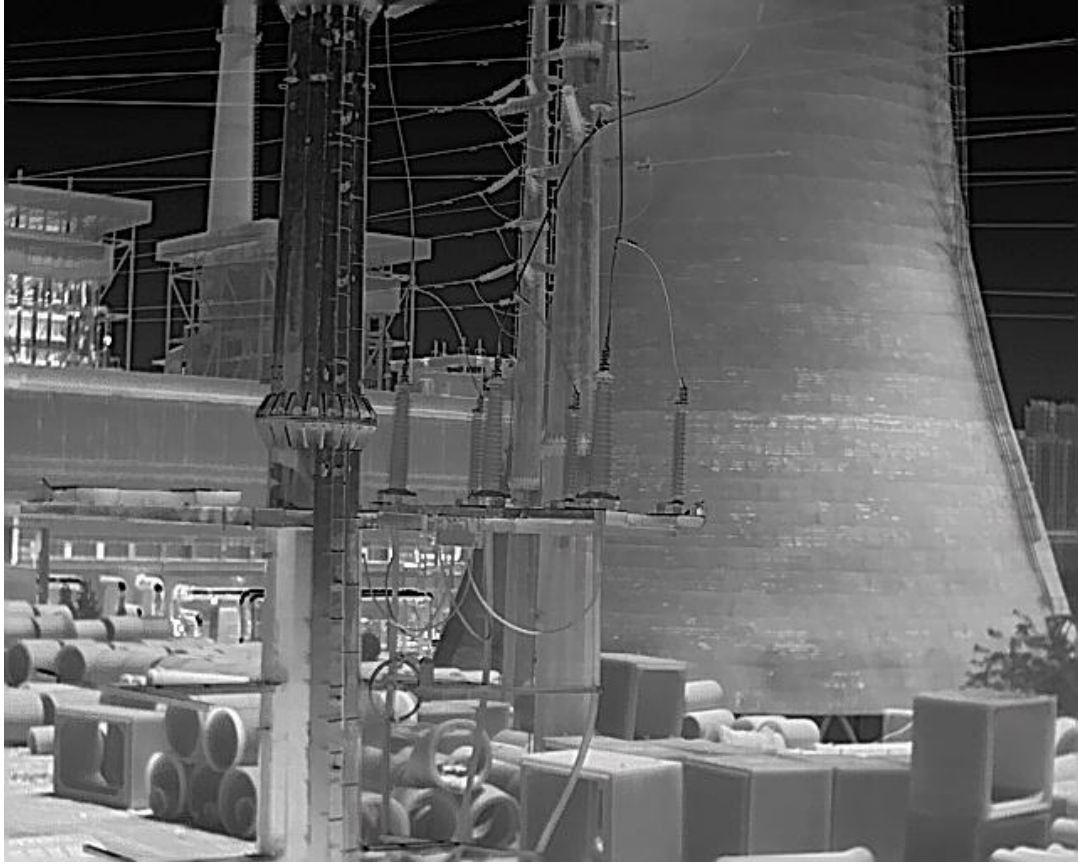
IR camera	
Resolution	640 × 512
FOV	47.1 ° × 38.5 °
Focal length	8.8mm
Diaphragm aperture	f/1.2
Spatial resolution	0.923mrad
Wavelength	8 μ m-14 μ m
Pixel spacing	12 μ m
(NETD)	≤50 mK @ f/1.0 25°C
Temperature measurement method	On point、on line、area analysis
Measurement range	-20°C - 150°C (High gain value) 0°C - 550°C (Low gain value)
EO camera	
Resolution	3264 × 2448
Sensor size	1/3 inches
Effective pixels	8Mpx
Pixel size	1.5 μ m
Optical Zoom	10x

FOV	9 ° -52 °
Focal distance	4.9-49mm
Diaphragm opening range	f/3.4- f/3.8
Gimbal	
Stable system	3 Axis (bend and lift, transverse, translation)
Angle movement	± 0.01 °
Others	
Weight	630g
Power consumption	10W
Protection rate	IP45

Post processing

The infrared information taken by the Compound series IR camera can be processed using the Gaode IR analysis software (ThermoTools). This software can analyze in detail each radiometric information quickly and efficiently.





Photos : Actual footage taken by the IR9T camera