

Infrared Sensors Detect Object Thermal Energy Convert Heat Signatures To Digital Signals Creating Visible Images Revealing Temperature Differences

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: MYT
- Certification: CNAS、CMA、CAL、ILAC-MRA
- Model Number: DT-05
- Minimum Order Quantity: 1
- Price: Pricing is negotiable based on order quantity
- Delivery Time: 10 work days
- Payment Terms: L/C,T/T
- Supply Ability: 1000units per month



Product Specification

- Resolution: 320 × 240 Pixels (after AI Enhancement)
- Pixel Improvement: 50%
- 10mm Lens Detection Range: Up To 1000 Meters
- 15mm Lens Detection Range: Up To 1500 Meters
- Working Principle: Passive Infrared Thermal Imaging Technology
- Protection Rating: IP66
- Highlight: handheld drone infrared sensor, thermal energy object detector, digital heat signature converter

Product Description

DT-05 Detecttheinfrared Radiation (heat)of The Objectand Convertitinto A Visible Image

1, Product Overview

Infrared thermal imagers are highly specialized night vision devices that leverage cutting - edge infrared detection technology. These devices operate by detecting the infrared radiation, which is essentially the heat emitted by objects. Once this infrared radiation is detected, it is then ingeniously converted into visible images that can be easily interpreted by the user.

To enhance their performance, infrared thermal imagers incorporate the latest AI image processing algorithms. These algorithms are designed to optimize the images, making them sharper and more detailed. Coupled with highly sensitive detectors, these imagers are capable of offering exceptional night vision and thermal imaging effects. The sensitive detectors can pick up even the slightest variations in infrared radiation, ensuring that no detail goes unnoticed.

These devices are specifically designed for professionals who need to conduct observations in low - light or completely dark settings. This includes applications such as security surveillance, where they can help security personnel monitor areas for any signs of intrusion. In search and rescue operations, infrared thermal imagers can detect the heat signatures of missing persons, even in difficult terrains. For field missions, whether it's for scientific research or exploration, they provide valuable thermal imaging visuals. Military use also benefits greatly from these devices, as they can assist in accurately identifying targets in complex and often unpredictable environments. By providing clear thermal imaging visuals, they enable users to precisely recognize and analyze objects, thereby facilitating better decision - making in these various professional scenarios.

2, Specification

Parameter	Specification
Product Name	Infrared Thermal Imager
Product Type	Professional Night Vision Device
Working Principle	Passive Infrared Thermal Imaging Technology
Detection Band	8-14μm Long Wave Infrared
Resolution	320 × 240 pixels (after AI enhancement)
Original Resolution	256 × 192 pixels
Pixel Improvement	50%
10mm Lens Field of View	Approximately 25° × 19°
15mm Lens Field of View	Approximately 17° × 13°
10mm Lens Detection Range	Up to 1000 meters
15mm Lens Detection Range	Up to 1500 meters
Thermal Sensitivity	≤50mK
Image Frame Rate	30Hz

Display Type	High-Resolution OLED
Screen Size	1.54 inches
Display Modes	Multiple pseudo-color modes (White Hot, Black Hot, Red Hot, Rainbow, etc.)
Digital Zoom	2×, 4×
Device Dimensions	120mm × 60mm × 50mm
Weight	Approximately 280g (without battery)
Operating Temperature	-20°C to +60°C
Protection Rating	IP66
Operating Voltage	3.7V DC
Battery Type	Rechargeable Lithium Battery
Battery Capacity	3000mAh
Continuous Working Time	Approximately 8 hours
Charging Time	Approximately 2.5 hours
Data Interface	USB-C
Video Output	HDMI Output Support
Storage Function	Maximum 128GB microSD Card Support
WiFi Connectivity	2.4GHz WiFi Support
Bluetooth Connectivity	Bluetooth 5.0

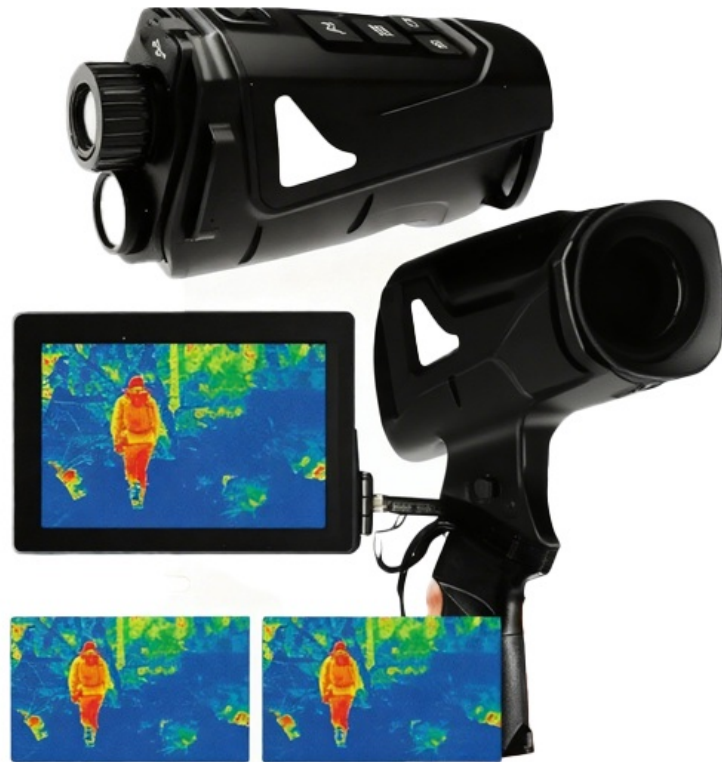
3, Features

The infrared thermal imager combines advanced tech with a high-sensitivity detector (thermal sensitivity $\leq 50\text{mK}$). It detects tiny temp differences and images well in low light. An AI algorithm boosts 256×192 resolution to 320×240 (50% more pixels) for clearer images. It supports multiple pseudo-color modes for target recognition.

It has ultra-long-distance detection with 10mm (1000m effective) and 15mm (1500m effective) lenses. It excels in biological sign recognition, valuable for search and rescue and security.

It's flexible for helmet, arm, or tripod mounting. Weighing 280g, it's lightweight with an ergonomic grip. Its intelligent features include 2× and 4× digital zoom, photo/video recording (up to 128GB), WiFi for remote monitoring, and motion detection.

Designed for all-weather use (-20°C to +60°C), it has an IP66 rating, low power consumption (8-hour runtime), and is made to military standards, resistant to electromagnetic interference and passing rigorous tests for reliability in harsh conditions.



4, Application Scenarios



5, Certification Certificate



6, Company profile

Chongqing Miao Yitang Technology Co., Ltd. is a specialized company engaged in anti-drone and unmanned intelligent defense management. With the technical support from the AI Internet of Things Research Institute of the Chinese Academy of Sciences and collaborations with multiple intelligent AI companies, the company has established research laboratories for AI unmanned field products, accumulating a variety of technical patents.

The company's products are widely applied to unmanned automatic management solutions for various defense and perimeter areas, including AI anti-drone systems and AI unmanned vehicle patrol systems. These systems integrate with multiple technologies such as optoelectronics, radar, vibration, thermal imaging, facial recognition, and radio frequency management, truly achieving a 24-hour uninterrupted anti-drone defense and ground perimeter defense warning system. This allows for cost savings for clients, reduction in human resource allocation, and

ensures the safety of clients' lives and property. The outstanding security system has won the company an excellent reputation and created higher value for its partners.



7, Customer Service

- 1). We offer 24 hours service after sales
- 2). If there are any usage or quality issues with the product, we provide online technical support to diagnose the cause of the problem.
- 3). Should you find the products unsatisfactory, kindly return it to us within a period of 3 months from the date of dispatch. Upon receipt and inspection, should the products be found to be free from any damage attributable to human factors, a full refund will be granted. Alternatively, we can engage in discussions to amend the product and subsequently reship the product to you.

A graphic of a clipboard with a silver clip at the top. The clipboard has a white sheet of paper with the following content:

CUSTOMER SERVICE

- * Fast and patient communication: professional sales reply immediately
- * Fast delivery: usually 2-7 days
- * Flexible Safe shipping: fast by air or sea with cheap freight
- * Customer-friendly: complete user manual and exact video training provided
- * After sales service: one year warranty and life time technical support

Below the text, there are logos for shipping companies: FedEx, TNT, UPS, and DHL. To the right of the shipping logos is an illustration of a hand holding a smartphone with various payment logos (VISA, AMEX, T/T, DISCOVER, WU, Apple Pay, G Pay, and others) floating around it. Below the shipping logos is an illustration of a cargo ship, a truck, and a van.



Chongqing Miao Yi Tang Technology Co., Ltd.

+8613101235550

gary@chinaantidrone.com

chinaantidrone.com

www.chinaantidrone.com