T Series

Handheld Thermal Camera

for Smart Power Inspection

Technical Data

V1.0.3

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1. Overview

1.1Update Comments

Our manuals are updated several times per year. Please contact us to get the latest manuals.

1.2 Authorized Release Notes

The authorized release of this manual is the Chinese version. In case of disagreement due to translation errors, the Chinese version shall prevail. If there is any update in the future, the Chinese version will be revised first.

2. T Series Technical Data

General Description
On the basis of fully understanding the current needs of users in the power industry during the inspection process, IRay technology has developed a high-performance, high-definition, high-sensitivity VOx infrared detector, and equipped a variety of professional lenses that meet the needs of the power industry for T series intelligent power inspection thermal camera. The thermal camera not only has many intelligent innovations in hardware, but also achieves more breakthroughs in software, such as intelligent shooting (inspection task package), intelligent management of database (picture retrieval, comparison, and analysis), intelligent diagnosis, etc. These functions help a lot to solve the painful troubles for users in the power industry and improve work efficiency and quality.

Advantages
1. Intelligent shooting (inspection task package), which can be imported to an Excel table of inspection tasks in advance, and an inspection task package can be automatically generated; 2. Built-in infrared diagnosis rules for electric equipment, which can quickly provide equipment defect diagnosis basis and suggestions to realize intelligent judgment; 3. With lens integrating manual and auto focusing, continuous auto focus is available; 4. Four image modes: infrared, PIP, dual-light fusion and visible light; 5. Database management (picture retrieval, comparison, and analysis); 6. 5-inch high-definition color LCD touch screen for convenient application of point/line/area temperature measurement tools; 7. Support 4G, Wi-Fi wireless video transmission function, and have microwave ranging, GPS, Bluetooth, etc.;

2.1 T300

T300 Technical Parameters	
Model	T300
Resolution	384*288
NETD	35mK
FOV	Standard 24°×18° Optional: 12°×9°, 6°×4.5°, 48°×36°
Temperature Measuring Range	-20℃～150℃(low temperature mode) 0℃～410℃(medium temperature mode) 300℃～650℃(high temperature mode) Optional: 300℃～2000℃
Temperature Measuring Accuracy	±2°C or ±2%
Digital Camera	Built-in 5 million pixel digital camera with LED light
Laser Ranging	Support 40m ranging
Focusing Mode	Manual, auto, and electric focusing
Changing Lens	Available
Palette	10 palettes
Temperature Measuring Setting	Support up to 10 points, 10 areas, 5 lines measuring at the same time, with the highest, lowest and average temperature.
Highest/lowest Temperature of the Full Screen	Support, automatically capture the highest temperature/lowest temperature of the full screen
Image Adjustment	Automatic/manual; linear or columnar; the maximum, minimum or temperature range can be set.
Digital Zoom	1 x, 2 x, 4 x, 8x
Image Mode	Infrared, visible light, PIP, fusion
Isotherm	Available
Temperature Difference	Automatically calculate the temperature difference of similar analysis
Text Annotation	Select a text annotation from the preset list, which can be edited in the thermal camera
Intelligent Shooting	Support inspection task package and automatic naming of images
Intelligent Diagnosis	Intelligent diagnosis of power defects (optional)
Voice Annotation	Support voice notes and be stored along with the image
Display Screen	5 inch touch screen
Wi-Fi	Remote transmission of real-time images to mobile phones/computers via Wi-Fi
4G	Remote transmission of real-time images to mobile phones/computers via 4G
GPS	With built-in GPS and can automatically add location information to the image (optional)
Bluetooth	Listen to audio information through Bluetooth headsets

Alarm Method	Automatic sound and light alarm for the set temperature value, higher or lower.
Storage Method	32G SD card
Image Format	jpg (including full temperature data)/png (including full temperature data)/standard format of the State Grid
Infrared Video Format	H.264 videos or infrared videos stored to SD card
Video Output Interface	Micro HDMI interface
Battery Type	Removable and rechargeable Lithium battery
Battery Working Time	3hrs@25℃
Battery Management	Support sleep mode
Charging Method	Socket charging
Encapsulation	IP54
Weight	≤1.3kg(with battery)
Dimensions	260x135x136mm
Operation Temperature	-20°C～55°C
Storage Temperature	-40°C～70°C

2.2 T600

T600 Technical Parameters	
Model	T600
Resolution	640*512
NETD	35mK
FOV	Standard 24°×19.3° Optional: 12°×9.7°, 6.0°×4.8°, 48°×38.5°
Temperature Measuring Range	-20℃～150℃(low temperature mode) 0℃～410℃(medium temperature mode) 300℃～650℃(high temperature mode) Optional： 300℃～2000℃
Temperature Measuring Accuracy	±2°C or ±2%
Digital Camera	Built-in 5 million pixel digital camera with LED light
Laser Ranging	Support 40m ranging
Focusing Mode	Manual, auto, and electric focusing
Changing Lens	Available
Palette	10 palettes
Temperature Measuring Setting	Support up to 10 points, 10 areas, 5 lines measuring at the same time, with the highest, lowest and average temperature.
Highest/lowest Temperature of the Full Screen	Support, automatically capture the highest temperature/lowest temperature of the full screen
Image Adjustment	Automatic/manual; linear or columnar; the maximum, minimum or temperature range can be set.
Digital Zoom	1X,2X,4X,8X
Image Mode	Infrared, visible light, PIP, fusion
Isotherm	Available
Temperature Difference	Automatically calculate the temperature difference of similar analysis
Text Annotation	Select a text annotation from the preset list, which can be edited in the thermal camera
Intelligent Shooting	Support inspection task package and automatic naming of images
Intelligent Diagnosis	Intelligent diagnosis of power defects (optional)
Voice Annotation	Support voice notes and be stored along with the image
Display Screen	5 inch touch screen
Wi-Fi	Remote transmission of real-time images to mobile phones/computers via Wi-Fi
4G	Remote transmission of real-time images to mobile phones/computers via 4G
GPS	With built-in GPS and can automatically add location information to the image(optional)
Bluetooth	Listen to audio information through Bluetooth headsets

Alarm Method	Automatic sound and light alarm for the set temperature value, higher or lower.
Storage Method	32G SD card
Image Format	jpg (including full temperature data)/png (including full temperature data)/standard format of the State Grid
Infrared Video Format	H.264 videos or infrared videos stored to SD card
Video Output Interface	Micro HDMI interface
Battery Type	Removable and rechargeable Lithium battery
Battery Working Time	3hrs@25℃
Battery Management	Support sleep mode
Charging Method	Socket charging
Encapsulation	IP54
Weight	≤1.3kg (with battery)
Dimensions	260x135x136mm
Operation Temperature	-20°C～55°C
Storage Temperature	-40°C～70°C