## KGT128PTL

# Multifunctional Acoustic Imager



## **Description**

KGT128PTL multifunctional acoustic imager is a portable intelligent detection equipment with 128 microphones, integrating PD location, infrared thermal imaging, gas leak detection, sound source identification and laser distance. It is widely used in live equipment inspection, non-contact temperature measurement, corona discharge/suspended discharge/surface discharge of exposed high voltage equipment. Detection and localization of discharges such as inside and outside of ceramic bushings, various compressed gas leaks and abnormal vibrations and other scenarios.



### **Features**

- Multifunction: KGT128PTL can be able to test PD location, infrared thermal imaging, gas leak detection, sound source identification and laser distance, It integrated all these instruments by one to save the cost, improve quality and efficiency.
- Data visualization: Thermal and acoustic images are superimposed with video images to visually analyze the anomalies generated by the device under test and its location in the image visible to the human eye.
- Portable design: fully consider the site use environment and the convenience of detection, two-handed grip, small and portable, convenient for the operation and maintenance inspection.
- Remote management: the system adopts a combination of hardware and software, the data collected by the equipment will communicate with the backend big data platform for easy storage and comprehensive analysis.

### Software





#### Software system picture 1:

It fully covers all functions of the infrared thermometer in the power inspection scene, including regional temperature measurement, temperature analysis, temperature warning, image fusion, photo, video, display enhancement, parameter and mode setting, etc. The temperature range can be set to -20  $\sim$  150 °C or 50 $\sim$ 550 °C, the accuracy can be up tp  $\pm 2$  °C or  $\pm 2\%$  of the measured value ( °C), and the temperature consistency is: Do not exceed the central value  $\pm 0.5$  °C.

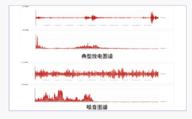


#### Software system picture 3:

The detection frequency is up to 48KHz, the detection frequency can be set arbitrarily, and the frequency range of concern can be set according to the actual situation, and the external interference signal can be filtered out.

#### Software system picture 2:

Based on the phenomenon of ultrasonic wave generated during partial discharge of power equipment, array ultrasonic detection technology is adopted to help the detection the level of partial discharge problems during inspection, and support the generation of PRPD spectrum of detection partial discharge, which is convenient for analysis and intuitive display of partial discharge characteristics.



#### Software system picture 4:

Time-domain diagram: show the time-domain characteristics of the acquired signal within one power frequency period (20ms)
Frequency domain diagram: show the frequency-domain characteristics of the acquired signal within one power frequency period (20ms)
The type of the acquired signal can be judged through the diagram.

# KGT128PTL

# Multifunctional Acoustic Imager



# **Technical specifications**

Infrared Resolution	640*512
Temperature Range	20°C ~ 150°C or 50°C ~550°C
Visible Camera Resolution	4096*2160
Zoom Lens	Manual Focus/ Automatic Focus
Number of Microphones	128 MEMS Microphones
Frequency band	2kHz-48kHz
Operation Distance	0.5m~50m
Laser distance measurement	Available
Laser pointer	Available
Battery Life	> 6 hours
Screen	8 inch Capacitive touch screen
Display Resolution	1920*1200
Storage Capacity	Standard 16G, Optional 32G
Communication Interface	USB 3.0
Operation Temperature	-40 °C ~60 °C
Dimension	270mm x 180mm x 48mm
Weight	≤ 1.5 kg
Ingress Protection	IP54

## **Test-Site**







