

# 2024 INDUSTRIAL INTRODUCTION



**Part 01**

# WHO WE ARE?

# ABOUT HIKMICRO

**HIKMICRO** is a rapidly growing company mainly focusing on thermal imaging industry, with visible light imaging and ultrasonic technology as additional areas, providing products and solutions to the world. HIKMICRO's products are widely used in the outdoor, industrial, security and safety industries and consumer electronics, etc., serving customers in over 100 countries and regions.



Employees  
**1400+**



Masters & PhDs  
**619**



Patents  
**403**



Total revenue in 2023  
**\$469M**



Year-on-year growth  
**17.5%**



Ranking  
**No.1** in thermal imaging

(Data source: According to the public annual financial report data of listed companies in China 2023)

# Industrial Overview

Business Introduction	<div>Industrial – Expert In Industrial Temperature Measurement And Detection</div> <div>Specializing in thermal technology innovation with the addition of acoustic technology, HIKMICRO provides handheld thermal imaging cameras, acoustic imaging cameras &amp; leak detectors, fire fighting thermal cameras, fixed thermography cameras and Instrumentation. They are used widely in building inspections, HVAC, predictive maintenance, utility inspection, water leakage detection, personal home maintenance, DIY applications, etc., increasing the safety and efficiency of industrial inspections.</div>					
	Building Inspection   Predictive Maintenance   Process Control HVACR   R&D Research   Firefighting					
Industries	Handheld Thermal Camera	Acoustic Products	Firefighting Cameras	Instrumentation	Fixed Cameras	Software & App
Product Categories	Handheld Thermal Camera	Acoustic Imaging Camera	Special industries Thermal Camera	Pyrometer Flow Meter Pressure Transmitter Level Meter	Box Camera Auto-focus Box Camera High Temperature Box Camera Heat Resistant Bullet Camera	Analyzer Viewer
	Mini Series Eco Series B Series M Series G Series SP Series	AI Series  Acoustic Leak Detector  AD21	Intrinsically Safe BX20  Firefighting Cameras FT Series FB Series			



# Milestones – About Hikmicro Industrial



2016

HIKMICRO was founded



2020

Temperature Screening  
Product Launch

2018

First Generation  
Product Launch (E1L,M10)



# Milestones – About Hikmicro Industrial



2023

Released 96\*96 handheld thermal camera to be must-have tool in a more affordable way.  
Released advanced imaging capabilities: SuperIR.



SuperIR™

2022

Acoustic Product Launch

Building on our expertise in thermal imaging, we have now expanded our product range to include cutting-edge ultrasonic technology.



2024

Instrumentation Product Launch

Expanded from temperature to flow, level, and pressure solutions.

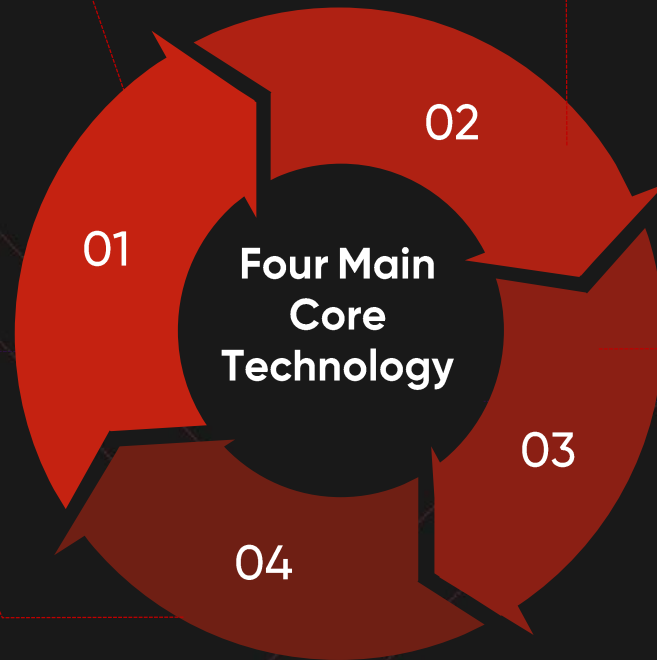
# Master The Core Advantages Of Detector

## 01. ROIC Circuit Design

- Low-noise processing technology to ensure high-resolution images
- Non-uniform correction technology to improve the dynamic range of the chip
- Standard/general digital interface, easy to integrate in various systems

## 04. MEMS Manufacture

- The minimum line width of the photolithography process can reach  $0.35\mu\text{m}$
- Stress-controllable metal and dielectric films
- High stability vanadium oxide thin film process



## 02. MEMS Pixel Structure

- Infrared enhanced absorption film layer design
- Response rate self-calibration technology to improve the accuracy of imaging effect and temperature measurement
- Non-TEC integration, excellent sensitivity and ultra-high signal-to-noise ratio

## 03. Vacuum Packaging

- Ceramic and wafer-level vacuum packaging
- High yield, small size, low cost
- High manufacturability and high process stability

# Strict Quality Control – In-house Manufacturing



## Detectors Manufacturing

**57000m<sup>2</sup>**

detector production line (8-inch) with level 10 clean room

Annual production capacity

**30.000 wafers /  
10.000,000 sensors**

- Integrated Circuit Design
- Manufacturing
- Packaging
- Testing

## Product Manufacturing

**12000m<sup>2</sup>**

manufacturing factory

Annual production capacity

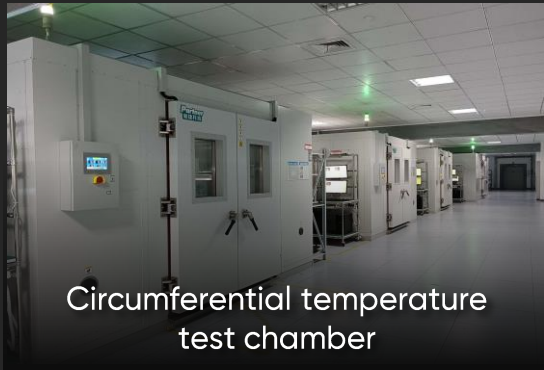
**1700,000 products**

- Multiple Standards Compliance
- Dust-free Packaging
- Strict QC (Aging And Air-tightness Tests, Etc.)
- Fully Automated (Core Components)



# Strict Quality Control – Quality Test

With multiple quality control tests, HIKMICRO strives to reach the highest standard of production and provides products with high stability and reliability.



Circumferential temperature  
test chamber



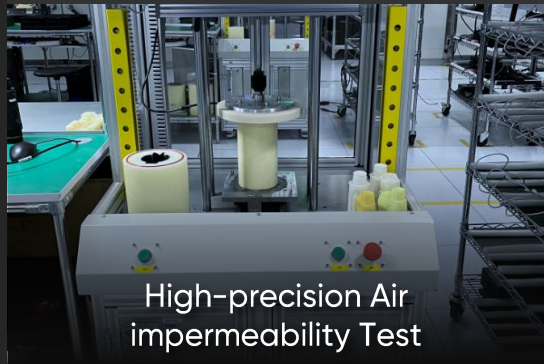
High-precision  
airtightness test



Maximum and minimum  
temperature test



Lint-free Manufacture



High-precision Air  
impermeability Test



Water-proof Test



R&D Blackbody Test



Automatic Production

Quality Test

Factory Environment

# Manufacturing And Calibration Certifications

## HIKMICRO passed the latest certifications

Type Approval Certificate  
for Measuring Instruments



### Laboratory Accreditations



**Hardware Laboratories**  
(EMC Laboratory, Safety Laboratory)  
Accredited by CNAS

**SGS CTF**

Laboratory Certification

**CQC**

Mandatory Product Certification  
(WMT Laboratory Qualification)

### Quality System Certifications

ISO



**QMS**

(Quality Management System)

**EMS**

(Environmental Management System)

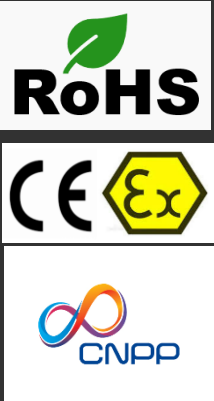
**OHSMS**

(Occupational Health And Safety  
Management System)

### Certifications



**HART**



### Calibration Certificate



# Premium Marketing System

## Pre-sale

5 customer service channels



## On-sale

29 subsidiaries and branches globally



## After-sale

30 localized repair centers globally





# Customer Service – 5 Customer Service Channels



**Official Website**

[www.hikmicrotech.com](http://www.hikmicrotech.com)



**Email**

General Enquiries: [info@hikmicrotech.com](mailto:info@hikmicrotech.com)  
Technical Support: [support@hikmicrotech.com](mailto:support@hikmicrotech.com)



**Call Centers**

In 2 districts cover 19 countries / regions.  
Hotline : +86 57186071609

**Social Media**



Hikmicro Industrial



Hikmicro Industrial



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HIKMICRO

**APP Online Service**



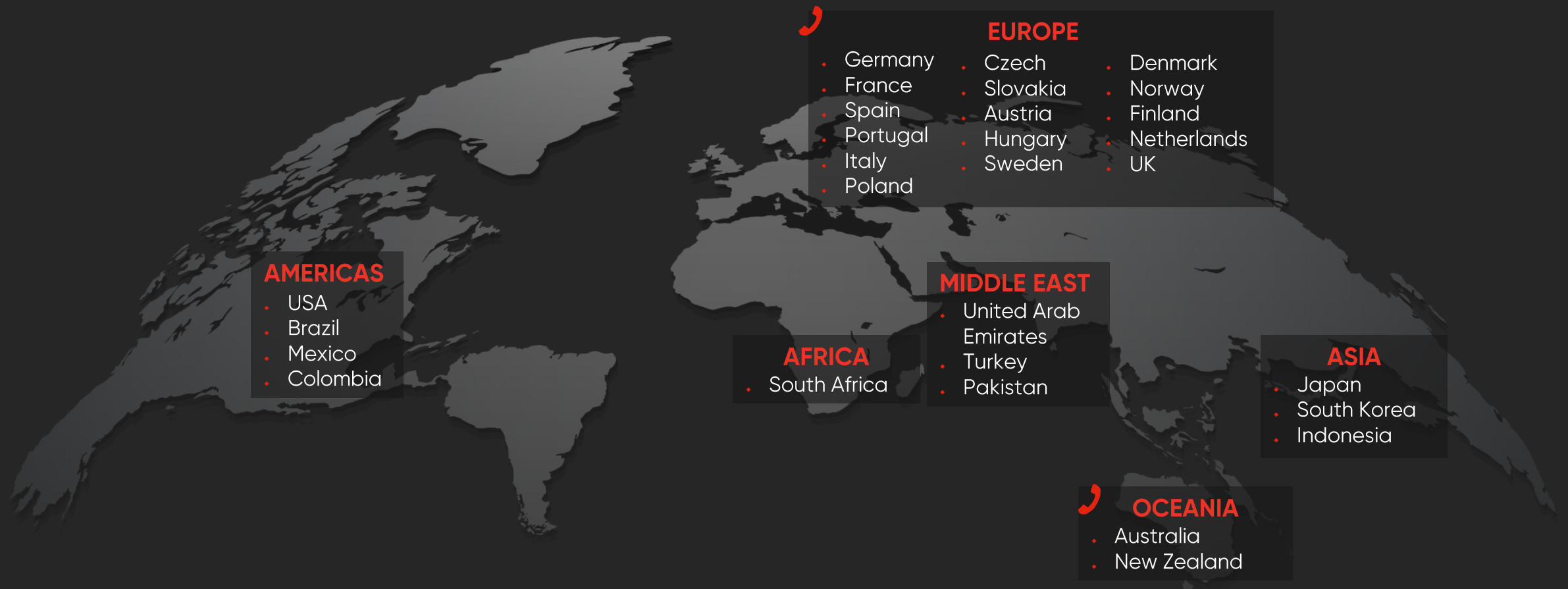
HIKMICRO  
VIEWER



# Local organization support

**29** international localized marketing offices

**21** BDMs of INDUSTRIAL Product Line





# After Sales Support

30 Localized Repair Centers | 6 Districts

3 DAYS

Treatments recommendation

10 DAYS

Repair completion

Note: Actual situation depends on each region.

- ★ HIKMICRO Official Repair Center
- ◆ Official Authorized Repair Center
- ◎ HIKMICRO Calibration Service Center

**AMERICAS**

◎ ◆ Mexico

**EUROPE**

◎ ★ Netherlands  
◎ ★ UK  
◎ Czech

**MIDDLE EAST**

◎ ★ United Arab Emirates

**ASIA**

◎ ◆ Japan  
◎ ★ South Korea

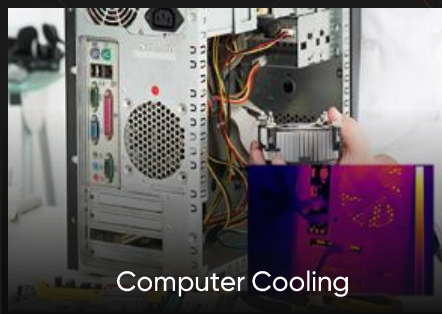
## Part 02

# Product and Industrial Application

# Handheld Thermal Camera



## Entry

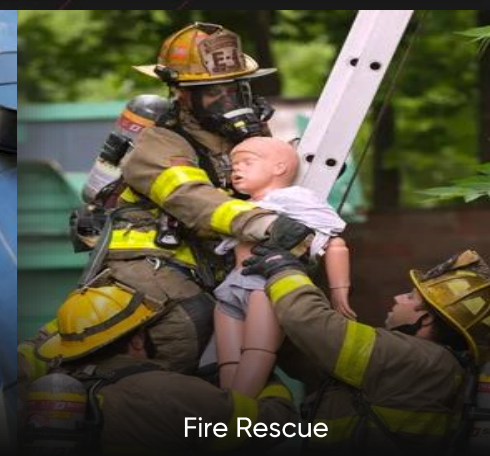


Mini Series, Eco Series, Pocket Series, B Series

## Middle & High-end Level



## Hazardous and Emergency Response Industries





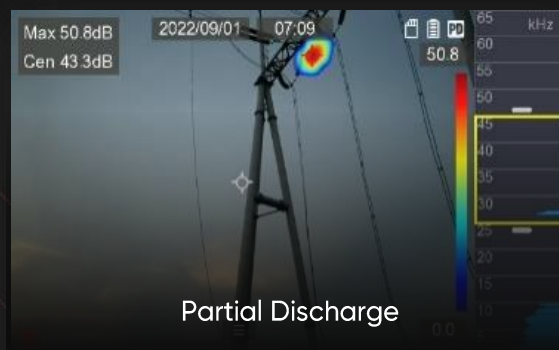
# Acoustic Products



## Acoustic Imaging Camera



Compressed Air Leak



Partial Discharge

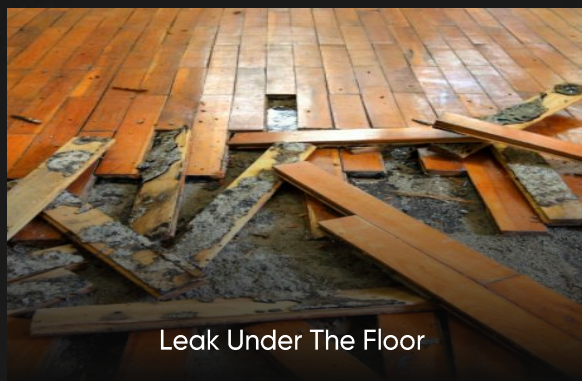


Gas Leak

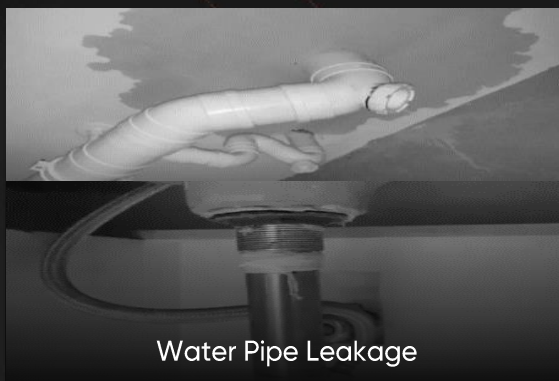


AI Series

## Acoustic Leak Detector



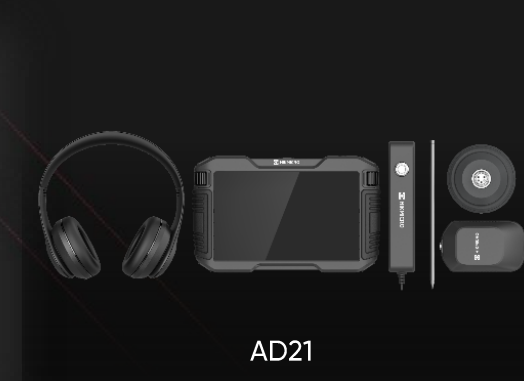
Leak Under The Floor



Water Pipe Leakage



Roofs And Walls



AD21

# Fixed



## Cube Camera



Computer Cooling



Electrical Box



Electrical Box



IR: 160 / 384

## Box Camera & Auto-Focus Box Camera



Food Processing



Rear Window Glass Heater



Plasma Coating



IR: 384 / 640

## High Temperature Box Camera & Heat Resistant Bullet Camera



Steel Mill



Metal Smelting



Cement Rotary Kiln



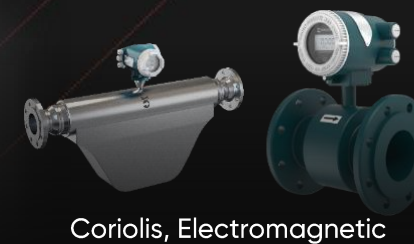
IR: 384 / 640



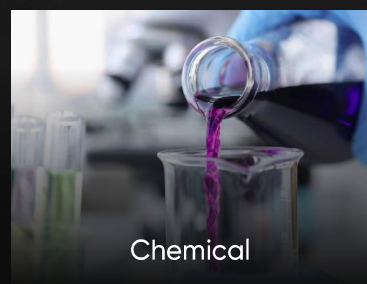
# Instrumentation



## Flow Meter



## Pressure Transmitter



## Level Meter



## Pyrometer

# HIKMICRO Viewer



HIKMICRO Viewer App is A powerful and intuitive APP designed for industrial thermal cameras.



# HIKMICRO Analyzer



HIKMICRO Analyzer is a powerful and free licensed PC software designed to help users manage and analyze thousands of thermal images and videos and quickly create professional reports.



# Key Advantages



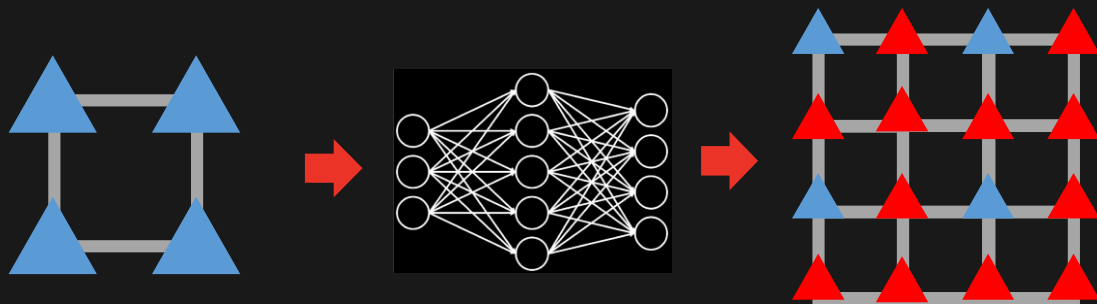
↓  
**Image Quality**



↓  
**Precision & Accuracy**

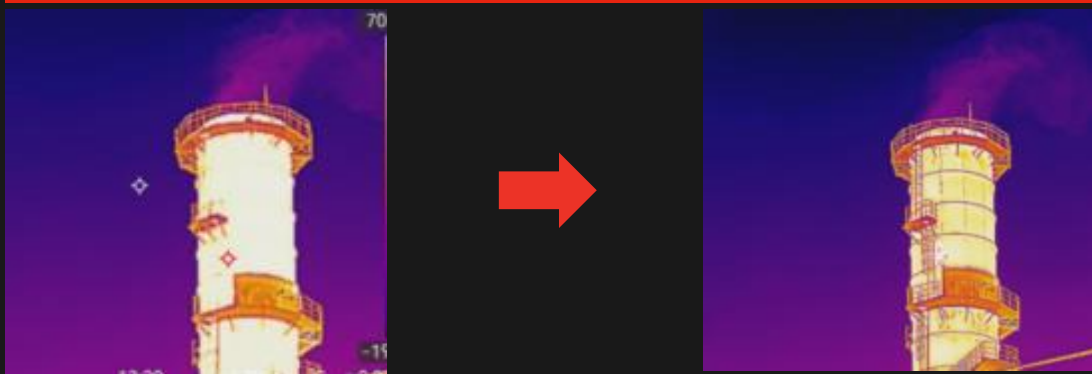


# SuperIR™ – Image Quality

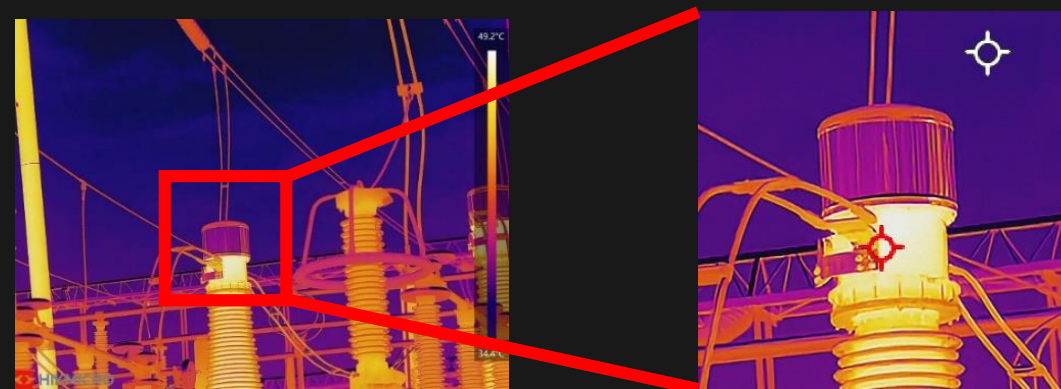


## Neural Network

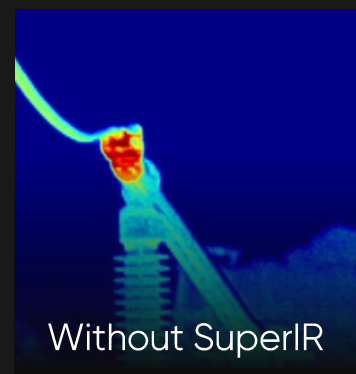
HIKMICRO's SuperIR uses neural networks to increase pixel count by 4x. Blue triangles show original pixels, red ones are predicted. This method enhances image quality, reduces noise, and smooths edges using scene-specific algorithms.



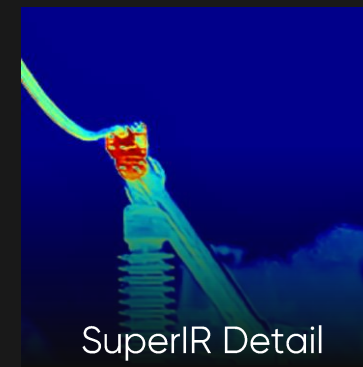
Reduce Image Noise



4x Image Resolution



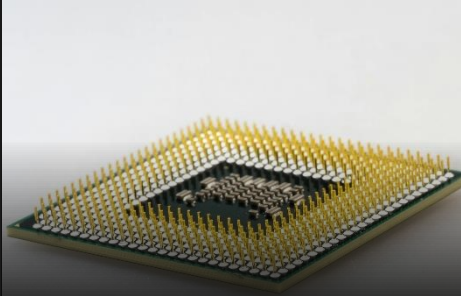
Without SuperIR



SuperIR Detail

Enhance Edge Details

# Temperature Measurement Performance



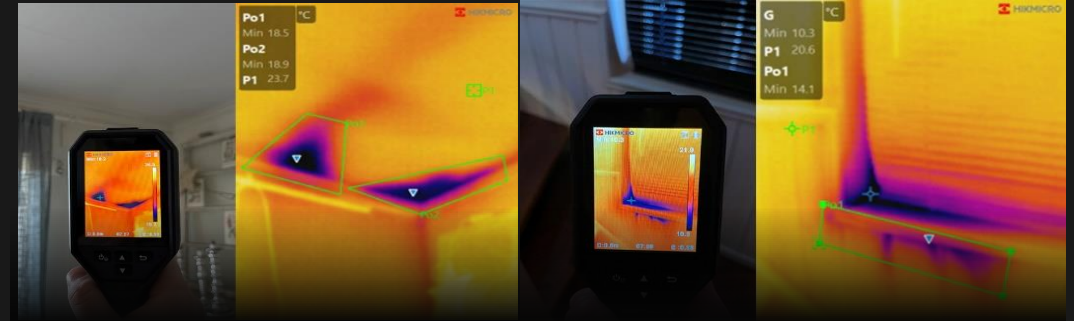
## Sensors

Advanced Sensor Technology



## Accuracy

Absolute Accuracy  $\pm 1^{\circ}\text{C}$



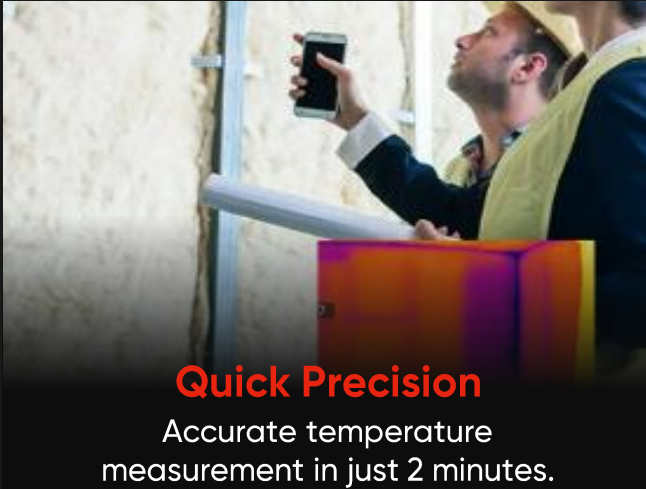
## Environmental Adaptability

With significant ambient temperature changes, devices maintain precise readings within 2 minutes.



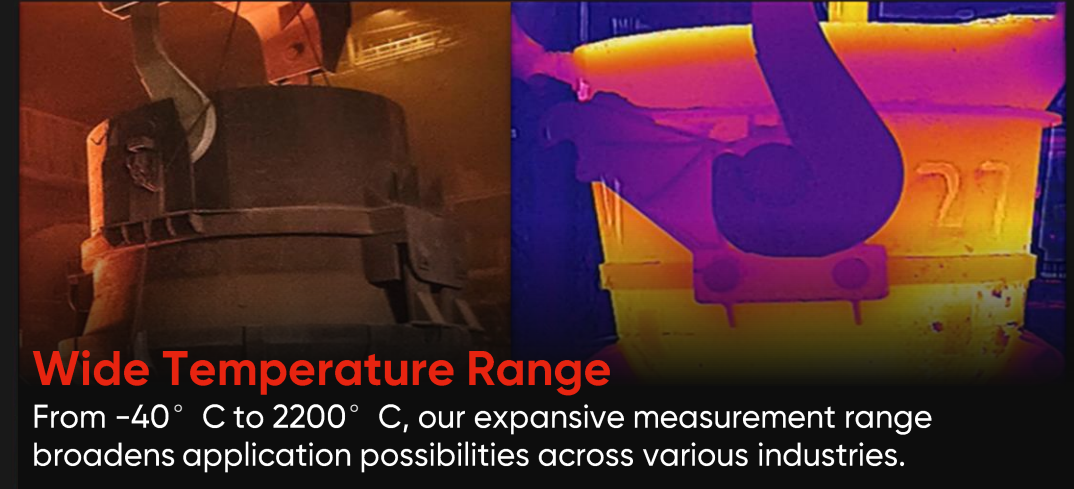
## Stable Measurements

Temperature stay within  $\pm 0.5^{\circ}\text{C}$ .



## Quick Precision

Accurate temperature measurement in just 2 minutes.



## Wide Temperature Range

From  $-40^{\circ}\text{C}$  to  $2200^{\circ}\text{C}$ , our expansive measurement range broadens application possibilities across various industries.



# Key Industries Overview – Global Market Applications

HIKMICRO's industrial products are deeply embedded in various global markets, reflecting our extensive expertise and experience in critical sectors. Our products are widely used in electric utilities, oil & gas, mining, industrial, building inspection, research and development (R&D), where precision and reliability are crucial.



Electric Utilities



Oil & Gas



Mining



Industrial



Building Inspection



# Electric Utilities – Applications

The electric utilities sector is the backbone of modern infrastructure, where the reliable and continuous operation of equipment is essential. With increasing energy demands and stringent safety regulations, thermal imaging has become an indispensable tool for monitoring and maintaining power systems.



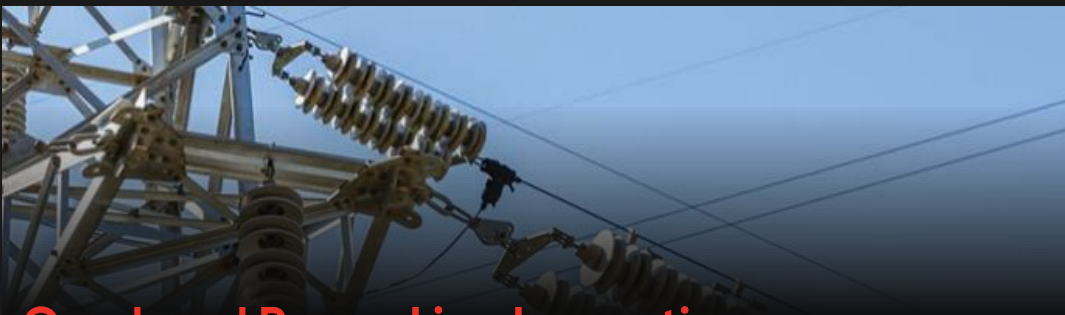
## Transformer Monitoring

Detecting hotspots in transformers to prevent failures and extend service life.



## Insulation Terminal Inspection

Non-contact temperature measurement for substation components, ensuring safety and early fault detection.



## Overhead Power Line Inspection

Identifying overheating in power lines and connectors to prevent outages and improve grid reliability.



## Solar Panel Inspection

Detecting thermal anomalies in solar panels to identify inefficiencies and potential failures.



# Industrial Manufacturing – Applications

Industrial manufacturing is the cornerstone of modern economies, where precision and efficiency are critical to maintaining competitiveness. Thermal imaging technology is increasingly used to enhance quality control, optimize production processes, and ensure the safety of equipment and personnel.



## Process Monitoring

Real-time monitoring of production processes, identifying temperature deviations that could impact product quality.



## Electrical Equipment Maintenance

Utilizing thermal imaging to identify abnormal heat patterns in electrical equipment, minimizing downtime and extending service life.



## Mechanical Equipment Maintenance

Using thermal imaging to identify abnormal heat patterns in machinery, reducing downtime and prolonging equipment lifespan.

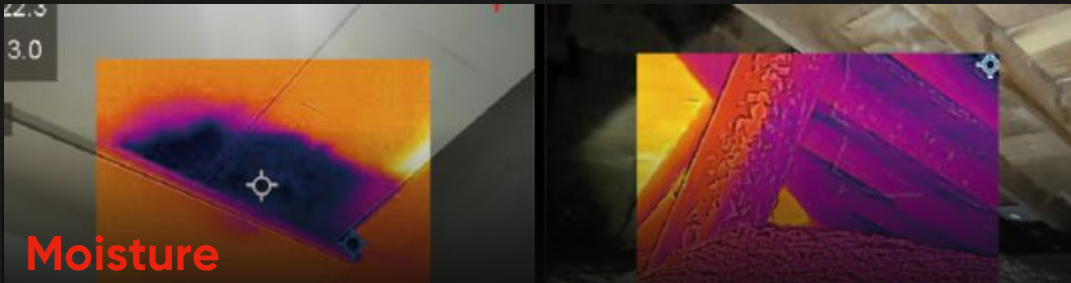


## Gas Leak Detection

With acoustic camera to identify gas leaks quickly, enhancing safety and preventing potential hazards.

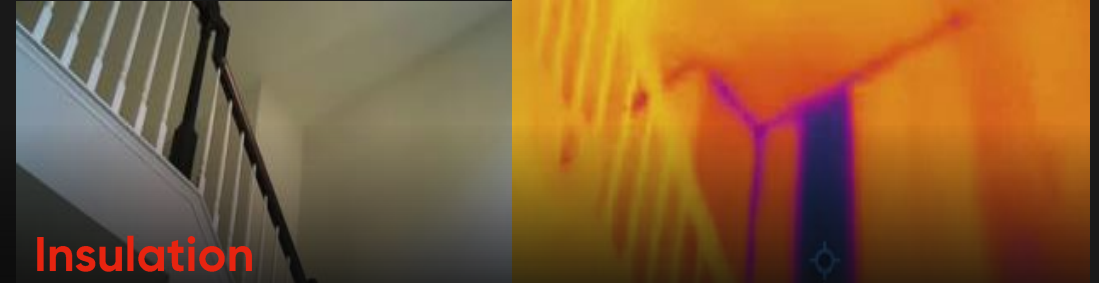
# Building Inspection — Enhancing Safety with Thermal Imaging

The building inspection sector requires precise and reliable tools to assess the safety, efficiency, and longevity of structures. Thermal imaging is a powerful method for detecting hidden issues in buildings, such as insulation problems, moisture ingress, and electrical faults.



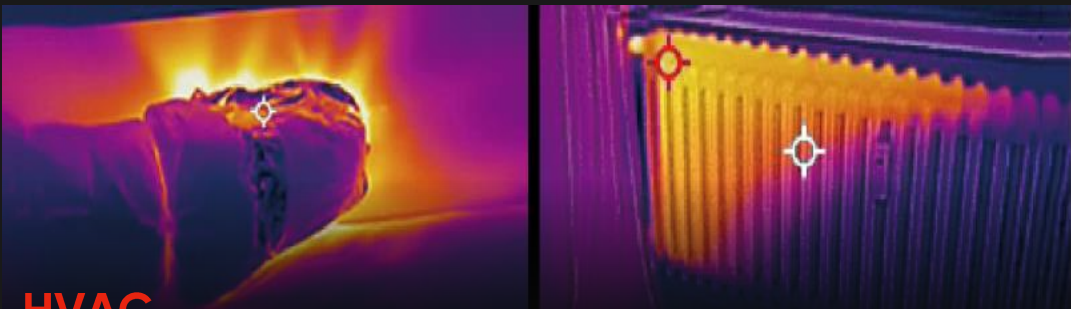
## Moisture

HIKMICRO Thermal imager can help identify areas of hidden moisture, which can then be repaired. It can see if any areas have accumulated moisture by detecting temperature differences.



## Insulation

HIKMICRO thermal imager can help find areas where insulation is missing, sagging, wet, or damaged, even most of the insulation is hidden behind drywall.



## HVAC

Thermal imaging can help you diagnose problems faster. You'll know the root of the problem sooner so you can get to work fixing it faster.



## Electrical Faults

By making heat visible, HIKMICRO thermal imaging cameras allow technicians to see what cannot be seen with the naked eye.

**Part 03**  
**CASE STUDY**



# Indonesia Transmission Lines Inspection

## Background

PLN (Indonesian National Power Company) is an Indonesian state-owned monopoly power company. It produces 66% of Indonesia's electricity. PLN is ranked 12th in Asia and second in Southeast Asia among the top 20 power companies in Asia Pacific in terms of revenue. PLN need a professional, stable thermal imaging camera that would allow staff to carry out inspections efficiently and safely in the substation environment.

## Application

To observe the connection points of the 150KV transmission towers in the high-voltage section for any anomalies, which is part of the transmission preventive maintenance.

## Product Model

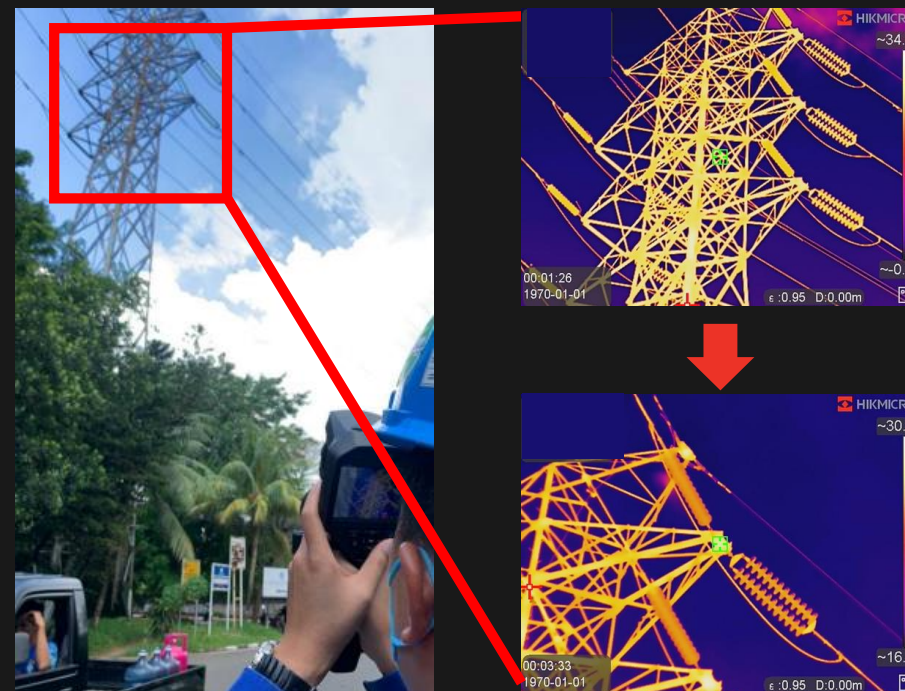
G40 x 13 pcs, 2x lens x 13 pcs

## Advantages

- Frame rate of 50Hz provides a fluent live view and NETD 35mK can gives you a better image.
- **Auto focus mode** provide less than 2 seconds focus speed, which saves time to get a clear image.
- Add-on 2x lenses with different FOV are suitable for accurate temperature measurement at longer distances.



**G SERIES**



# Jordan Electricity Company

## Background

Jordan Electric Power Company (JEPCO) is a major utility company in Jordan responsible for generating, transmitting, and distributing electricity in the central region of the country, including the capital, Amman. Established in 1938, JEPCO is one of the oldest and largest electricity providers in Jordan. The company is committed to delivering reliable and efficient electricity services to its customers, investing in modern infrastructure, and incorporating renewable energy sources to meet the growing energy demands.

## Application

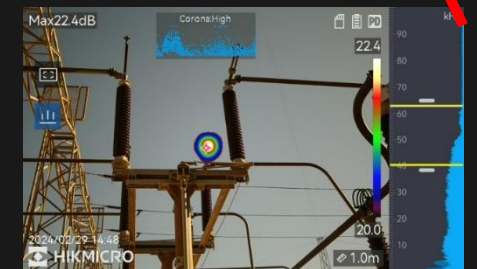
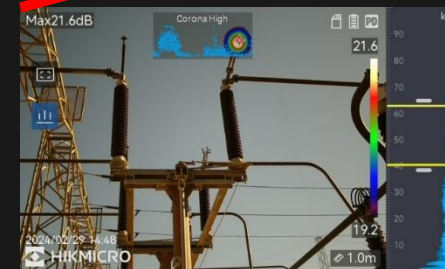
JEPCO uses the AI56 for partial discharge detection in their substations. The AI56 allows JEPCO's maintenance team to quickly and accurately identify partial discharge issues from a safe distance, even on complex equipment. Its lightweight design, ease of use, and robust construction make it ideal for routine inspections. The AI56 also provides detailed reports and analysis, helping JEPCO maintain the reliability and efficiency of their electrical infrastructure.

## Product Model

AI56 x 1 pcs



**AI SERIES**



# Thailand Byd Service Center Vehicle Inspection

## Background

According to BYD China's regulations, every service center has to be equipped with a thermal imaging cameras for vehicle repair. BYD's customer service center needs to perform temperature checks on various cable connector areas of the vehicle, especially the battery section. They needed a device that could view images and temperatures in real time, and a thermal camera was a better choice for them.



## M SERIES

## Application

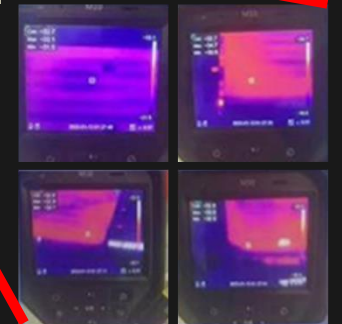
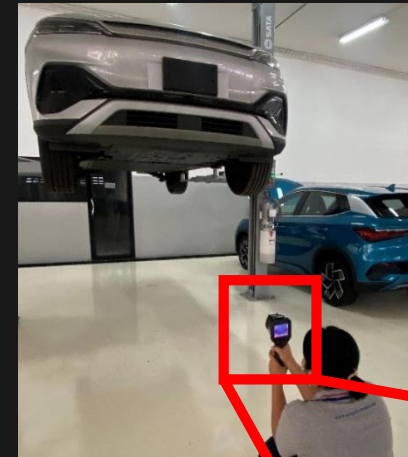
Thermal camera is used to check the temperature of power terminals and cables, all the captured images are output and analyzed in the software Analyzer, Reports are also generated in Analyzer and submitted to the system to complete the inspection.

## Product Model

M10 x 80 pcs

## Advantages

- HIKMICRO M10 with manual focus can provide clear image in short or long distance.
- HIKMICRO team provided professional technical training to help the end users to complete the inspection efficiently and accurately.



# THANK YOU



HIKMICRO Industrial



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HIKMICRO

Public Email Address: [info@hikmicrotech.com](mailto:info@hikmicrotech.com)

Official Website: [www.hikmicrotech.com](http://www.hikmicrotech.com)