



IN PARTNERSHIP WITH



**AKEENAH  
GROUP LTD**

Africa's Trusted  
Procurement Company

# INDUSTRIAL PRODUCT INTRODUCTION

| 2025.Q2

## Regional Partner and Authorized Distributor for Hikmicro Solutions in Africa

- Your trusted regional gateway for Hikmicro's thermal, industrial & security imaging solutions.
- Combining global technology with local execution — ensuring fast response, tailored solutions, and long-term reliability.
- Available across Kenya, DRC, Tanzania, Uganda, and Senegal.

[sales@akeenahgroup.com](mailto:sales@akeenahgroup.com) | [salesdrc@akeenahgroup.com](mailto:salesdrc@akeenahgroup.com)

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# CONTENTS

- ◆ PRODUCT FAMILY
- ◆ THERMAL PRODUCTS
- ◆ ACOUSTIC PRODUCTS
- ◆ MOBILE APPLICATIONS  
AND PC SOFTWARE



Part 01

# PRODUCT FAMILY



# PRODUCT CATEGORIES



Thermal

## Handheld



## Fixed



## Firefighting



## Intrinsically Safe

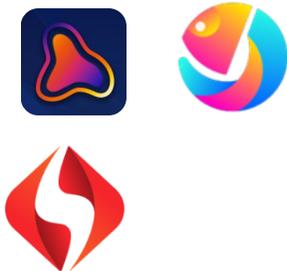


Acoustic

## Acoustic



## Software



# PRODUCT MATRIX - HANDHELD



## Entry

- 256 / 384
- Manual Focus & Fixed Focus



Mini Series

Smartphone Attachment  
For iOS and Android

- 96



Eco Series

PocketE

- 192 / 256
- Wi-Fi



B Series



Pocket Series

## Middle & High-end Level

- 192 / 256 / 384 / 640
- Wi-Fi
- Manual Focus & Fixed Focus
- Touch screen
- Removable Batteries /Memory Card



M Series

- 384 / 480 / 640
- Wi-Fi
- Touch screen
- Removable Batteries /Memory Card
- Optional Lenses
- Auto Focus



Gx1 Series

- 480 / 640 / 1280
- Wi-Fi
- Touch screen
- Removable Batteries /Memory Card
- Optional Lenses
- Auto Focus
- DV Form Factor



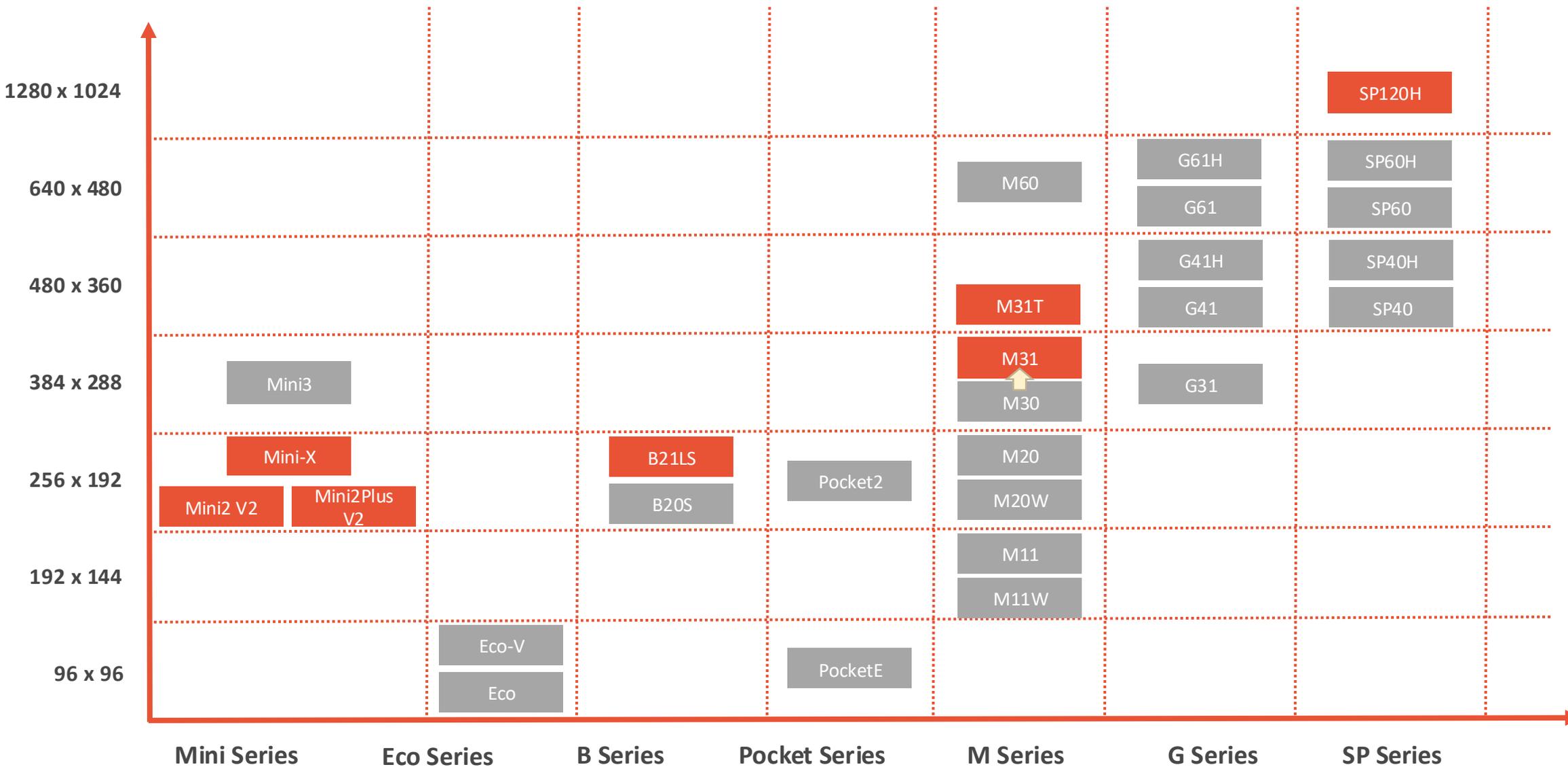
SP Series

# PRODUCT OVERVIEW



New Products

Released Products



# WHERE IS THERMOGRAPHY UTILIZED?

PM

## Predictive Maintenance

- ◆ Electrical
- ◆ Mechanical and Machinery
- ◆ Facility
- ◆ Process Equipment

BI

## Building Inspection

- ◆ Restoration (water)
- ◆ Energy Loss
- ◆ Home Inspection
- ◆ Commercial Building & Facility Maintenance

HV

## HVAC/R Inspection

- ◆ Residential
- ◆ Commercial
- ◆ Refrigeration

UT

## Utility

- ◆ Transmission Systems
- ◆ Distribution Systems
- ◆ Solar Inspection

TP

## Transportation Gas, Diesel, EV

- ◆ Engine Systems
- ◆ Electrical, Battery, Charging
- ◆ Passenger Comfort

DIY

## DIY

- ◆ Home Inspection
- ◆ Outdoors and Hobbies

Part 02-1

# HANDHELD PRODUCTS

01 Mini Series

02 Eco Series

03 E Series

04 B Series

05 Pocket Series

06 M Series

07 G Series

08 SP Series



# MINI SERIES - PRODUCT MATRIX



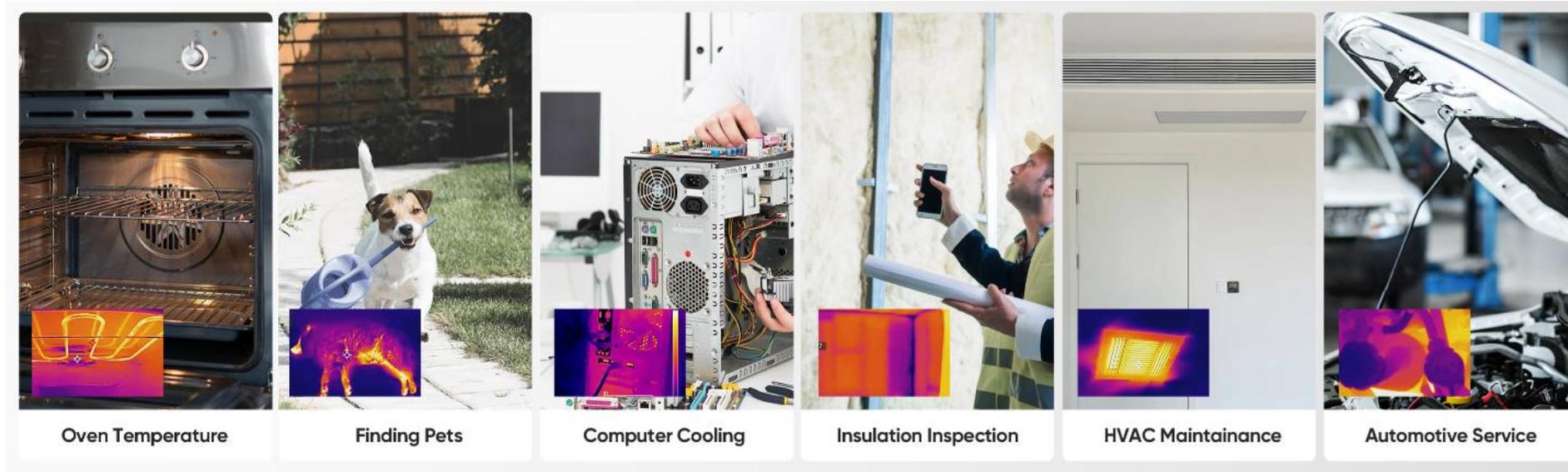
Make your phone smarter with HIKMICRO thermal camera



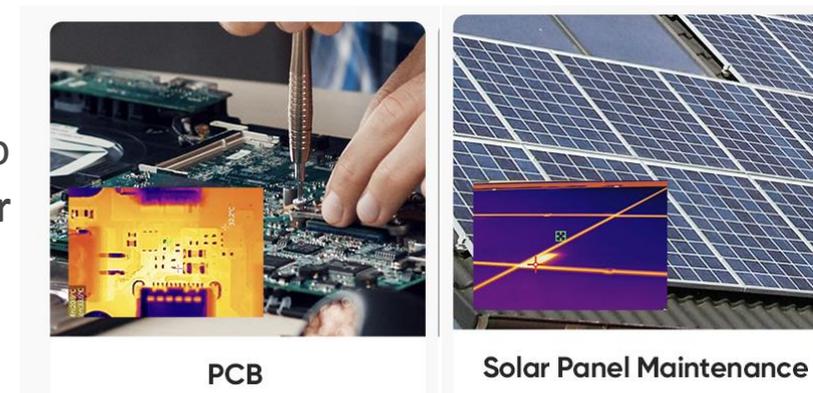
# MINI SERIES – APPLICATION SCENARIOS



Make your phone smarter with HIKMICRO thermal camera



**Mini2Plus V2** with its manual focal lens is also suitable for **PCB inspection** and long-distance **solar panel inspection**.



# ECO SERIES - OVERVIEW



IR Performance, Surprisingly Affordable, and Absolutely Brilliant



## Eco

- Thermal Only
- SuperIR
- Laser Pointer
- 2.4" LCD Screen
- -20°C to 550°C
- 8 hours Continuous Runtime



## Eco-V

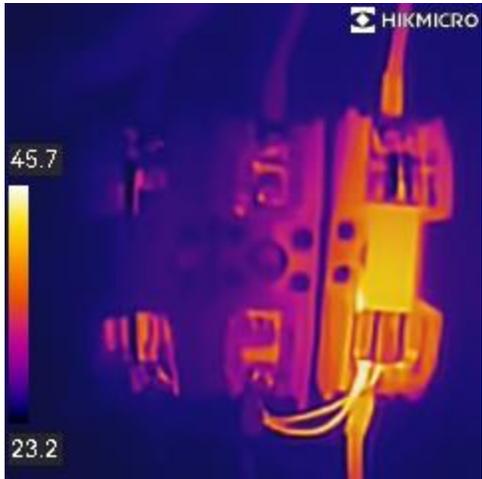
- Visible Camera
- Thermal/Fusion/Visual
- SuperIR
- Laser Pointer
- 2.4" LCD Screen
- -20°C to 550°C
- 8 hours Continuous Runtime



## PocketE

- Visible Camera
- Thermal/Visual/Fusion/PIP/Blending
- SuperIR
- Wi-Fi Connectivity
- 3.5" LCD Touch Screen
- On-camera Video Recording
- LED Flashlight/Bluetooth/Microphone & Buzzer
- Soft Carrying Pouch Included

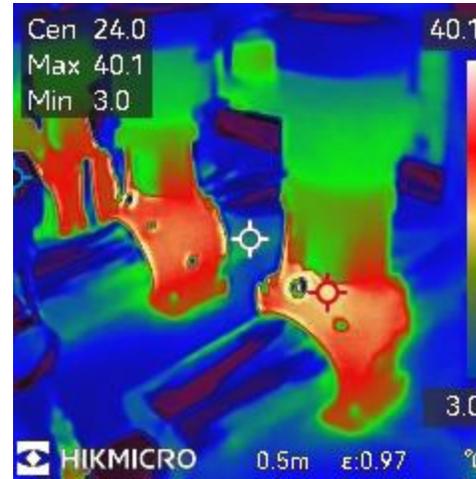
# ECO SERIES – APPLICATIONS



## Electrical Inspection

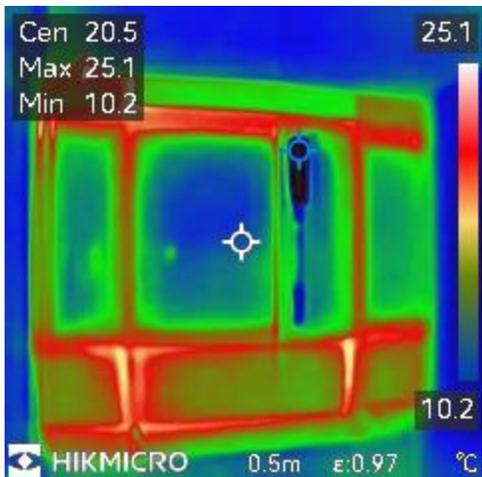
Electrical problems can relate to problems such as loose or over-tight connections, shorted or overloaded circuits, load imbalances, and components that have failed or are fatigued, such as fuses, circuit breakers, transformers, etc. Most electrical problems exhibit a gradual rise in temperature prior to their failure.

And thermal imaging can recognize this heat. By detecting these early, you can prevent the possibility of fire.



## Mechanical Predictive Maintenance

Thermal imaging is great for spotting a lack of uniformity in equipment by indicating hot and cold spots in surface temperature, through infrared image capture. Heat is often an early symptom of equipment damage or malfunction, making it important to monitor preventive maintenance programs. Monitoring equipment performance with thermal imaging cameras can reduce the likelihood of unplanned downtime due to equipment failure, reduce reactive maintenance fees and equipment repair costs, and extend the lifespan of machine assets.



## Building Inspection

In building inspections, missing or damaged insulation, building envelope air leaks, and moisture intrusion can be very difficult to find before they become serious enough to damage or destroy building contents. Thermal cameras can and have been utilized in the discovery of otherwise undetectable heat, air, and moisture anomalies in all types of structures.



## HVAC

With thermal imaging technology, technicians and heating engineers can make doubly sure that a central heating system has been thoroughly maintained. Not only does this provide peace of mind for the operator themselves, and it also allows them to show clients the results of their work and even help convince them of the need for maintenance in the first place. Thermal technology stands out as the only way to provide a comprehensive, visual, and quantitative assessment of the efficacy of maintaining HVAC Radiators.

# B SERIES - OVERVIEW

Compact and easy to use camera for daily operation



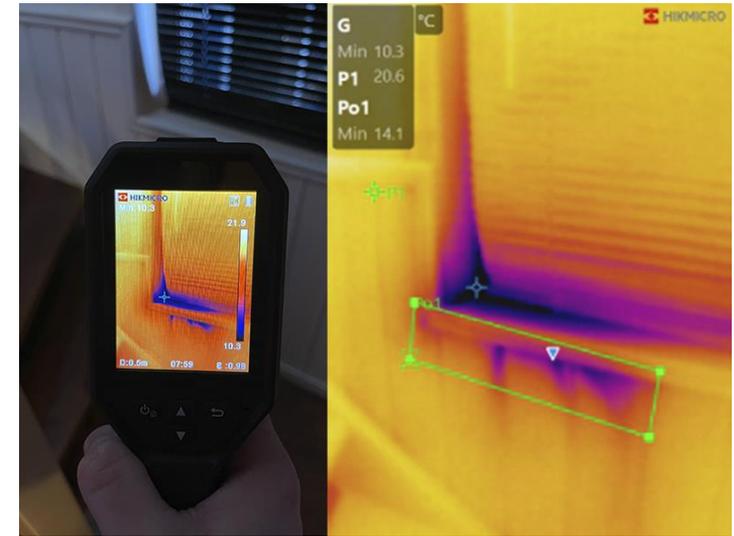
Basic Parameters	B21LS	B20S
IR Resolution	256 x 192 (49 125 pixels)	
SuperIR	Yes, on Captured Thermal Images	Yes, on captured images and live view
FOV (H × V)	37.2° × 50.0°	
Visual Camera	×	2 MP
Laser Pointer	✓	×
Led Flashlight	×	✓
Wi-Fi	✓	
Display	480 × 640 Resolution, 3.2" LCD Screen	480 × 640 Resolution, 3.2" LCD Screen
Object Temperature Range	-20 °C to 550 °C (-4 °F to 1022 °F)	
Focus	Focus-free, 0.3 m (0.98 ft) Min. Focusing Distance	
Storage Media	Built-in EMMC (16 GB)	
Battery Operating Time	6 Hours	

# B SERIES – APPLICATIONS



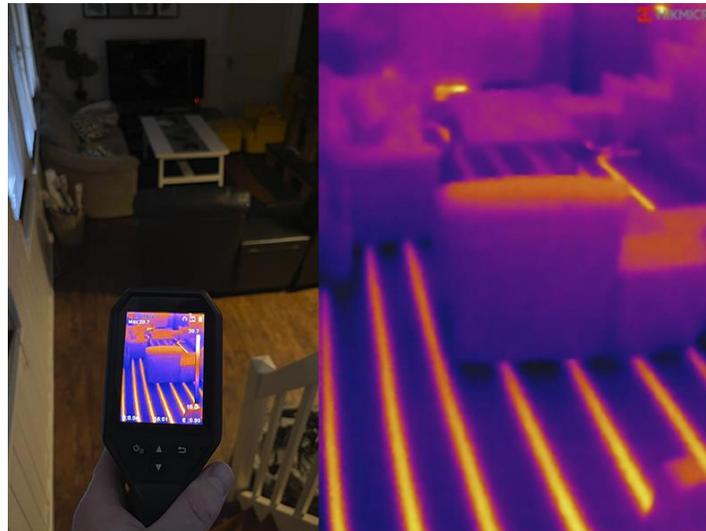
## HVAC Inspection

A handheld thermal imager can be used to troubleshoot HVAC problems effectively and efficiently. It can find blocked registers, broken junctions, condenser units, electrical problems, radiant floor heating, and coil temps in a flash.



## Water Leak Inspection

Hidden water can wreak havoc on insulation, wood, electrical components and, eventually, finishes when it does reveal itself. As long as the conditions are right, thermal imaging will find the leakage area though showing the temperature variances between water and surrounding materials.



## Find Air Leakage

When insulation is missing in walls or rafters, it can cause energy loss and increase heating and cooling costs. As long as the conditions are right, a thermal imaging camera can help identify areas with energy loss, especially those in hard-to-reach locations or behind walls.

# POCKET SERIES - OVERVIEW

High performance compact thermal imaging camera



Basic Parameters	Pocket2
<b>IR Resolution</b>	256 x 192 (49,152 pixels)
<b>FOV (H × V)</b>	50° × 37.2°
<b>Wi-Fi</b>	√
<b>Visual Camera</b>	Max. 8MP
<b>Image Modes</b>	4: Thermal/Visual/Fusion/PIP
<b>Storage Media</b>	Built-in EMMC (16 GB)
<b>Battery Operating Time</b>	4 Hours
<b>Weight</b>	218 g (0.48 lb)
<b>Object Temperature Range</b>	-20 °C to 400 °C (-4°F to 752°F)
<b>Focus</b>	Focus-free

# POCKET SERIES - APPLICATIONS



**Electrical**  
Electricians



**Equipment**  
First Level  
Maintenance



**Building Envelope**  
Building Inspection



**HVAC Inspection**  
HVAC Contractors

# M SEIRES - OVERVIEW



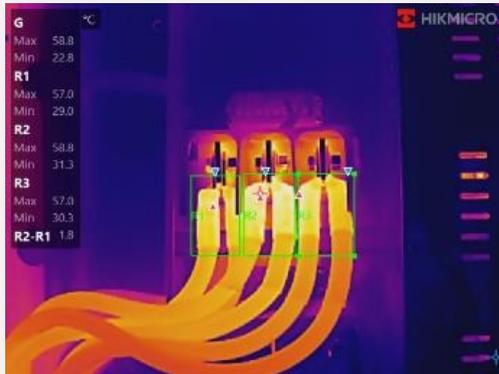
Advanced thermal imaging cameras with full function analysis



Basic Parameters	M11	M11W	M20W	M20	M31	M60
IR Resolution	192 × 144 (27,648 pixels)	192 × 144 (27,648 pixels)	256 × 192 (49,152 pixels)	256 × 192 (49,152 pixels)	384 × 288 (110,592 pixels)	640 × 480 (307,200 pixels)
SuperIR	384 × 288 (110,592 pixels)	384 × 288 (110,592 pixels)	512 × 384 (196,608 pixels)	512 × 384 (196,608 pixels)	768 × 576 (442,368 pixels)	1280 × 960 (1,228,800 pixels)
NETD	< 40 mK (@ 25 °C, F#=1.0)				< 30 mK (@ 25 °C, F#=1.0)	
Focal Length	6.9mm	3.6mm	3.5 mm	6.9 mm	10 mm	15mm
FOV	18.8° × 14.1°	37.2° × 27.8°	50° × 37.2°	25° × 18.8°	41.1° × 30.5°	41.9° × 33.3°
Focus	Manual Focus	Focus Free	Focus Free	Manual Focus	Manual Focus	Manual Focus
Visual Camera	3264 × 2448 (8 MP)					
Min. Focusing Distance	0.1 m (0.33 ft)	0.5 m (1.64 ft)	0.5 m (1.64 ft)	0.1 m (0.33 ft)	0.1 m (0.33 ft)	0.3 m (0.98 ft)
Object Temp. Range	-20 °C to 550 °C (-4 °F to 1022 °F)					-20 °C to 650 °C (-4 °F to 1202 °F)
Accuracy	Max. (± 2°C/3.6°F, ± 2%), for ambient temperature 15°C to 35°C (59°F to 95°F) and object temperature above 0°C (32°F)					
Display	640 × 480 Resolution, 3.5" LCD Touch Screen					
Wi-Fi	802.11 b/g/n (2.4 GHz and 5 GHz)					
Storage	Default Storage: Removable SD Card (16 GB) ; Max. Storage Capacity: 128 GB				Default Storage: Removable SD Card (64 GB) ; Max. Storage Capacity: 128 GB	
Weight	Approx. 660g (1.46 lb)	Approx. 660g (1.46 lb)	Approx. 660g (1.46 lb)	Approx. 660g (1.46 lb)	Approx. 660g (1.46 lb)	Approx. 686g (1.51 lb)
Battery Life	6 hours x 2	6 hours x 2	6 hours x 2	6 hours x 2	4 hours x2	4 hours x2

# M SERIES – APPLICATION

## Users and Benefits



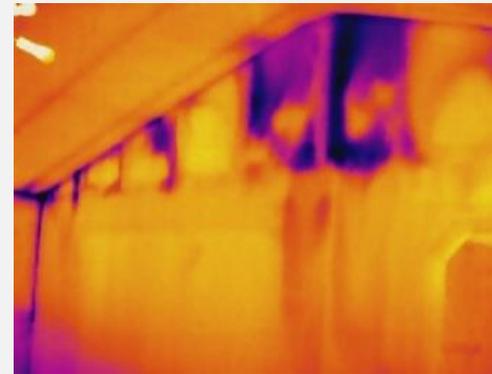
### Check Electrical

Predictive Maintenance  
Technicians



### Check Underfloor Heating

Building Maintenance  
Technicians



### Check Insulation Condition

Building Maintenance  
Technicians



### Check Mechanical Status

First Level Maintenance

# Mxx

◆ **Manual focus** is ideal for **electrical, HVAC, and mechanical systems** that may have small components in tight spaces or maybe in a dangerous area (heat, electric, up high, in/around operating components).

◆ Allow the user to maximize pixel density on small objects where measuring temperature is critical to identify in or out of specification.



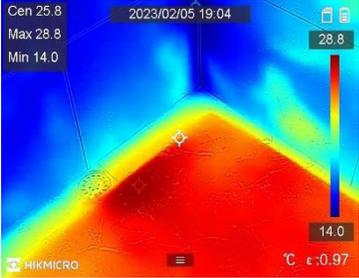
Specifications	M11	M20	M31	M60
IR Resolution	192 × 144 (27,648 pixels)	256 × 192 (49,152 pixels)	384 × 288 (110,592 pixels)	640 × 480 (307,200 pixels)
NETD	< 40 mK (@ 25 °C, F#=1.0)		< 35 mK (@ 25 °C, F#=1.0)	
Focal Length	6.9 mm	6.9 mm	9.7 mm	15 mm
FOV (H x V)	18.8° × 14.1°	25° × 18.8°	<b>41.1° × 30.5°</b>	41.9° × 33.3°
Min. Focusing Distance	0.1 m (0.33 ft)	0.1 m (0.33 ft)	0.1 m (0.33 ft)	0.3 m (0.98 ft)
IFOV	1.74 mrad	1.74 mrad	1.75 mrad	1.13 mrad
Application Scenarios				

# MxxW

## Fixed Focus and wide FOV cameras

These cameras have the same resolution, sensitivity, and operating frequency as the manual focus models, but the fixed focus with wider angle FOV makes them great for **scanning walls, floors, facades for items** that typically present themselves on a larger scale including water leaks, insulation issues, air infiltration.



Specifications	M11W	M20W
IR Resolution	192 × 144 (27,648 pixels)	256 x 192 (49,152 pixels)
NETD	< 40 mK (@ 25 °C, F#=1.0)	
Focal Length	3.6 mm	3.5 mm
FOV (H x V)	37.2° x 27.8°	50° x 37.2°
Min. Focusing Distance	0.5 m (1.64 ft)	0.5 m (1.64 ft)
IFOV	3.33 mrad	3.33 mrad
Application Scenarios		
		

# G SERIES OVERVIEW

- The new Gx1 series builds on the success of the current model and offers faster focusing, additional zoom capabilities, and new high temperature modes.
- In addition to retaining the powerful functions of Gx0, Gx1 series provides **more model choices** to meet the needs of customers with different budgets to make the most suitable choice for them.
- At the same time, the **Add-on lenses** can satisfy different scenario detection needs, with the **2-second focus speed** and the new **ultra-high temperature models** making the Gx1 series perform better in electric and industrial scenarios.

Basic Parameters	G31	G41	G41H	G61	G61H
IR Resolution	384 x 288	480 x 360	480 x 360	640 x 480	640 x 480
SuperIR	768 x 576	960 x 720	960 x 720	1280 x 960	1280 x 960
NETD	< 35 mK (@ 25 °C, F#=1.0)				
Image Frequency	50 Hz				
Focal Length	15 mm	25 mm	25 mm	25 mm	25 mm
Field of View (FOV)	25° × 19°	18.7° × 14°	18.7° × 14°	25° × 19°	25° × 19°
Spatial Resolution (IFOV)	1.13 mrad	0.68 mrad	0.68 mrad	0.68 mrad	0.68 mrad
Focus Mode	Laser Assisted AF/Continuous AF/AF/Manual Focus/Touch AF				
Focus Speed	Approx. 2 second				
Visual Camera	3264 × 2448 (8 MP)				
Digital Zoom	1.x to 8.x continuous				
Object Temperature Rang	-20 °C to 650 °C (-4 °F to 1202 °F)	-20 °C to 650 °C (-4 °F to 1202 °F)	20 °C to 2000 °C (-4 °F to 3632 °F)	-20 °C to 650 °C (-4 °F to 1202 °F)	-20 °C to 2000 °C (-4 °F to 3632 °F)
HDMI Interface	Yes				
GPS & Compass	Yes				

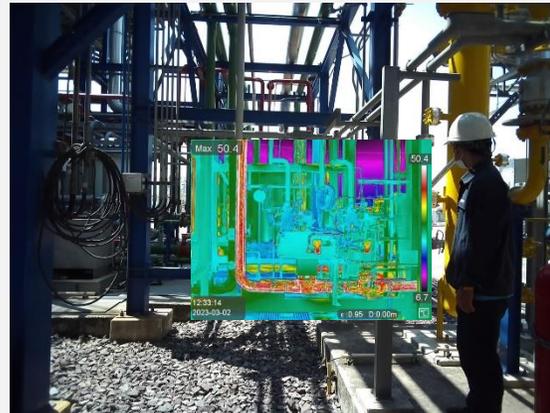


# G SERIES - APPLICATION SCENARIOS

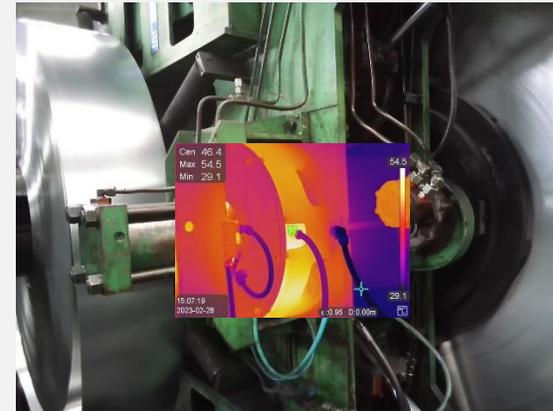
## Users and Benefits



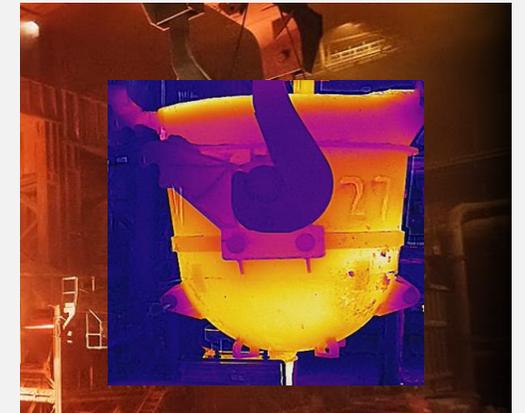
Electric Utilities



Facility Maintenance



Manufacturer



Kilns

- Building Professionals/ Inspectors/ Engineers/ Researchers/ Facility Maintenance Personnel

# G SERIES - MORE EFFICIENT INSPECTION

## 3 Add-on Lenses 【G41/G61】

3 Add-on Lens 0.5X, 2X, and 3.3X are available for choice. Different teleconverter gives different Field Of View, which gives more choices when facing different scenarios.

For most factory environments, the standard lens can cover the user's inspection needs. Detection of equipment at high places and more complex environments with three optional lenses. Allowing users to more safely target electrical equipment, factory machinery and equipment.



**HM-G605-LENS1**

Focal Length	7.5 mm
FOV (Field of View)	G31:50°(H) × 37.4°(V)
Min. Focusing Distance	0.2 m (0.7 ft)



**HM-G620-LENS1**

Focal Length	30.6 mm
FOV (Field of View)	G31:12°(H) × 9°(V)
Min. Focusing Distance	1 m (3.3 ft)



**HM-G630-LENS1**

Focal Length	53.5 mm
FOV (Field of View)	G31:7°(H) × 5.2°(V)
Min. Focusing Distance	2 m (6.6 ft)

# SP SERIES - OVERVIEW

Basic Parameters	SP40	SP40H	SP60	SP60H	SP120H
IR Resolution	480 × 360 (172,800 pixels)	480 × 360 (172,800 pixels)	640 × 480 (307,200 pixels)	640 × 480 (307,200 pixels)	1280 × 1024 (1 310 720 pixels)
SuperIR	960 × 720 (691,200 pixels)	960 × 720 (691,200 pixels)	1280 × 960 (1,228,800 pixels)	1280 × 960 (1,228,800 pixels)	2560 × 2048 (5,242,880 pixels)
NETD	< 30 mK (@ 25 °C, F#=1.0)				< 20mK (@ 25 °C, F#=1.0)
Image Frequency	25 Hz				30Hz
Focal Length	25 mm	25 mm	25 mm	25 mm	35 mm
Field of View (FOV)	18.7° × 14°	18.7° × 14°	24.8° × 18.7°	24.8° × 18.7°	25° × 20°
Spatial Resolution (IFOV)	1.13 mrad	0.68 mrad	0.68 mrad	0.68 mrad	0.34 mrad
Focus Mode	Laser Assisted AF/Continuous AF/AF/Manual Focus/Touch AF				
Focus Speed	Approx. 1 second				
Visual Camera	3264 × 2448 (8 MP)				4208 × 3120 (13 MP)
Digital Zoom	1.x to 12.x continuous				
Object Temperature Rang	-20 °C to 650 °C (-4 °F to 1202 °F)	-40°C to 2200°C (-4°F to 3992°F)	-20 °C to 650 °C (-4 °F to 1202 °F)	-40°C to 2200°C (-4°F to 3992°F)	-40°C to 2200°C (-40°F to 3992°F)
Accuracy	Max. (± 2°C/3.6°F, ± 2%)	±1°C (±1.8°F): 0 to 100°C (32 to 212°F); ±1%: 10 to 150°C (212 to 302°F); ±2°C (±3.6°F): -40 to 0°C (-40 to 32°F); ±2%: 150 to 2200°C (302 to 3992°F)	Max. (± 2°C/3.6°F, ± 2%)	±1°C (±1.8°F): 0 to 100°C (32 to 212°F); ±1%: 10 to 150°C (212 to 302°F); ±2°C (±3.6°F): -40 to 0°C (-40 to 32°F); ±2%: 150 to 2200°C (302 to 3992°F)	Max. (± 2°C/3.6°F, ± 2%)
Viewfinder	N/A	N/A	Yes	Yes	Yes
HDMI Interface	Yes				
GPS & Compass	Yes				

SP40/SP40H



SP60/SP60H

# SP SERIES – OPTIONAL ACCESSORIES

## Lenses



**HM-SP650-MACRO**

SP40/SP40H: 9.9 mm x 7.48 mm  
SP60/SP60H: 13.02mm x 9.9mm



**HM-SP605-LENS**

SP40/SP40H: 37.3°(H) x 27.8°(V)  
SP60/SP60H: 50°(H) x 37.3°(V)



**HM-SP620-MACRO**

SP40/SP40H: 23.4 mm x 17.44 mm  
SP60/SP60H: 31.54mm x 23.4mm



**HM-SP610-LENS**

SP40/SP40H: 18.7°(H) x 14°(V)  
SP60/SP60H: 24.8°(H) x 18.7°(V)



**HM-SP620-LENS**

SP40/SP40H: 9°(H) x 6.8°(V)  
SP60/SP60H: 12°(H) x 9°(V)



**HM-SP630-LENS**

SP40/SP40H: 6°(H) x 4.5°(V)  
SP60/SP60H: 8°(H) x 6°(V)

## Accessories



### Pouch

- ( HM-SP01-POUCH )
- 100% Polyester
  - 27.5 cm c 13 cm x 21 cm  
(10.8" x 5.1" x 8.3")



### Replacement Battery

- ( HM-7250DC(O-STD) )
- 4800 mAh, 7.2 V

### Replacement 2-Bay Battery Charger

(HM-20322ZC)

- Input 100~240 V / 1.6 A
- Output 20 V / 3.25 A

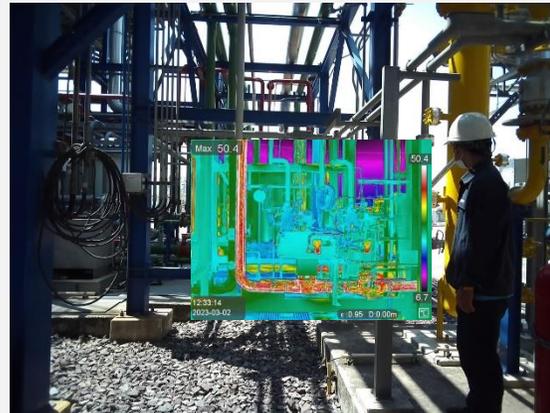


The SP series comes with two batteries in the box, and optional batteries are also available

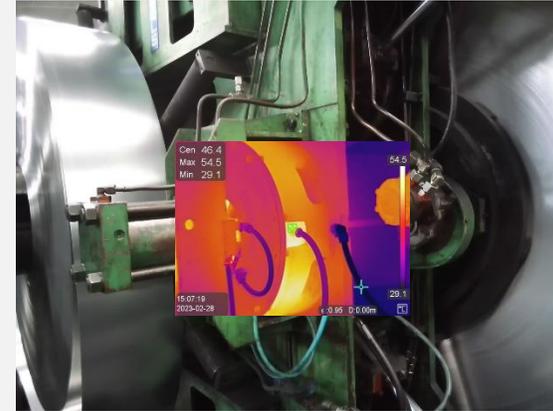
# SP SERIES – APPLICATION SCENARIOS



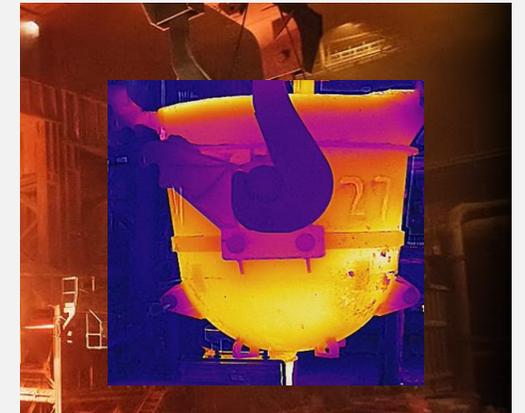
**Electric Utilities**



**Facility Maintenance**



**Manufacturing**



**Kilns**

- Building Professionals/ Inspectors/ Engineers/ Researchers/ Facility Maintenance Personnel

Part 02-2

# INDUSTRIAL PRODUCTS

01 Explosion-proof Series

02 Firefighting Series

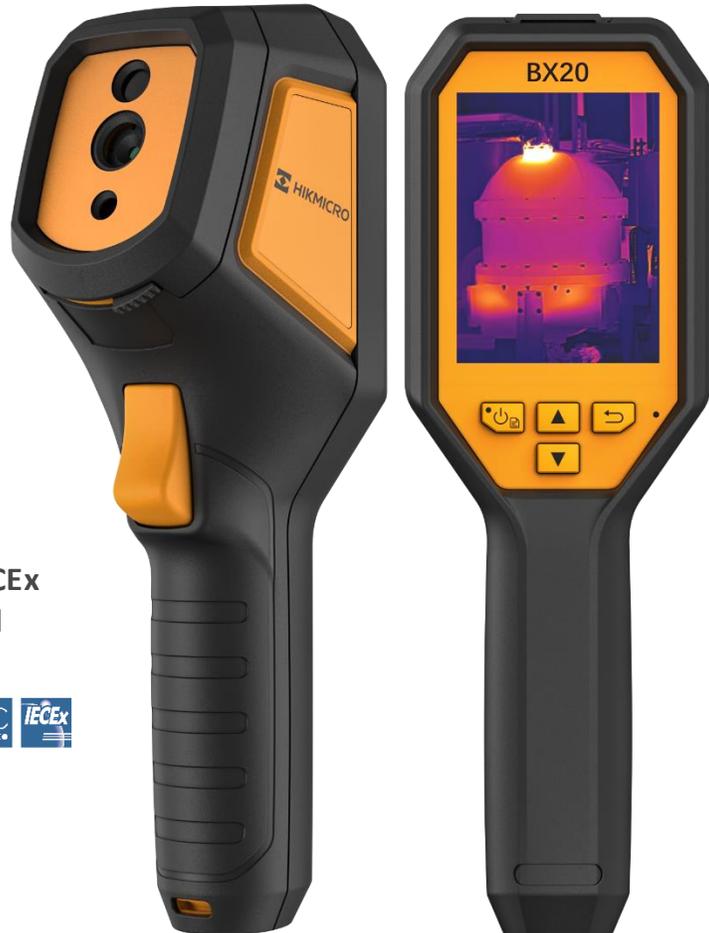
03 Automation Series



# BX20 - OVERVIEW



Compact Intrinsically Safe Thermal Camera for use in Hazardous Areas



ATEX & IECEx  
Certified



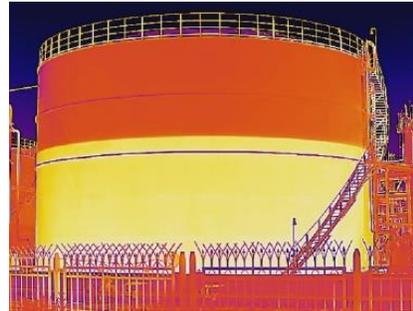
Basic Parameters	BX20
IR Resolution	256 × 192 (49,152 pixels)
SuperIR	<b>Yes, on Captured Thermal Images</b>
NETD	< 40 mK (@ 25 °C, F#=1.0)
Image Frequency	25 Hz
Field of View (FOV)	37.2° × 50.0°
Visual Camera	1600 × 1200 (2 MP)
Led Flashlight	√
Object Temperature Rang	-20°C to 550°C (-4°F to 1022°F)
Focus	Focus-free, 0.3 m (0.98 ft) Min. Focusing Distance
Protection Level	IP54/2 m (6.56 ft)
Storage Media	Built-in EMMC (16 GB), Approx. 90,000 Images
<b>Explosion-Proof Protection</b>	<p><b>Gas</b></p> <p><b>ATEX: II 3 G Ex ic IIC T6 Gc</b></p> <p><b>IECEx: Ex ic IIC T6 Gc</b></p> <p><b>Dust</b></p> <p><b>ATEX: II 3 D Ex ic IIIC T85°C Dc</b></p> <p><b>IECEx: Ex ic IIIC T85°C Dc</b></p>
Battery Operating Time	Approx. 6 hours
Weight	Approx. 380 g (0.84 lb)

# APPLICATIONS

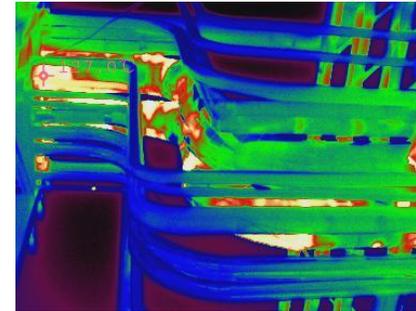
It is suitable for Zone 2 scenarios in petrochemical plants, refineries, substations, offshore platforms, production plants, pharmaceuticals, hazardous waste management and other industries.



Reactor



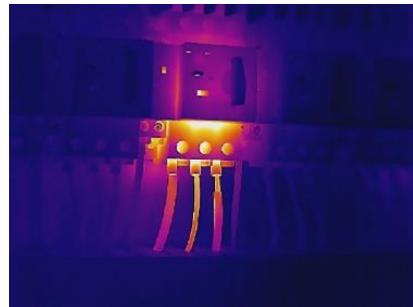
Oil Tank



Pipe



Tank Insulation



Electrical



Mechanical

# FB21- OVERVIEW

The HIKMICRO FB21 is a compact, reliable, firefighting thermal camera designed for firefighters to observe in total darkness and smoke, helping to save lives, protect property, and keep firefighters safe.

Features like dual cameras, LED flashlights, easy-to-navigate buttons, and a temperature range of up to 550°C (1022°F) help you work effortlessly in harsh environments. 8 color palettes for you to choose from, which satisfy most application scenarios.



Basic Parameters		FB21
Infrared Image	IR Resolution	256 × 192 (49,152 pixels)
	NETD	< 40 mK (@ 25 °C, F#=1.0)
	Image Frequency	25 Hz
	Field of View (FOV)	37.2° × 50.0°
	Min. Focusing Distance	0.3 m (0.98 ft)
	Focus Mode	Focus Free
Image Display	Visual Camera	1600 × 1200 (2 MP)
	Display	240 × 320 Resolution, 3.2" LCD Screen
	Color Palettes	Basic, Black Hot, White Hot, Fire Detection, Rescue, Hot Area, Cold Area, Building
Measurement and Analysis	Object Temperature Rang	-20°C to 550°C (-4°F to 1022°F)
	Accuracy	Max. (± 2°C/3.6°F, ± 2%), for ambient temperature -20°C to 50°C (-4°F to 122°F) and object temperature above 0°C (32°F)
General	LED Light	Yes
	Battery Type	Rechargeable Li-ion battery
	Protection Level	IP65
	Drop Test Height	2 m (6.56 ft)
	Working Temperature Range	Up to 10 minutes for ambient temperature -10°C to 90°C (14°F to 194°F); up to 2 minutes for ambient temperature -10°C to 115°C (14°F to 239°F)
	Weight	Approx. 380 g (0.84 lb)

# FB21- FOR OR OBSERVING IN TOTAL DARKNESS AND SMOKE

Working Temperature Range:

Up to 10 minutes for ambient temperature  $-10^{\circ}\text{C}$  to  $90^{\circ}\text{C}$  ( $14^{\circ}\text{F}$  to  $194^{\circ}\text{F}$ )

up to 2 minutes for ambient temperature  $-10^{\circ}\text{C}$  to  $115^{\circ}\text{C}$  ( $14^{\circ}\text{F}$  to  $239^{\circ}\text{F}$ )

Object Temperature Range:  $-20^{\circ}\text{C}$  to  $550^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$  to  $1022^{\circ}\text{F}$ )



FB21



For Smoke Systems



For Fire Rescue



For Building

# FT31 - OVERVIEW

The HIKMICRO FT31 is a high-performance firefighting thermal camera designed for firefighters to observe in total darkness and smoke, helping to save lives, protect property, and keep firefighters safe. Features like object details enhancement, easy-to-navigate buttons and a working temperature range of up to 260°C(500°F) help you work effortlessly in harsh environments. 8 color palettes for you to choose from satisfy most application scenarios.



Basic Parameters		FT31
Infrared Image	IR Resolution	384 x 288 (110,592 pixels)
	NETD	< 35 mK (@ 25°C, F#=1.0)
	Image Frequency	60 Hz
	Field of View (FOV)	54.1°×40.2°
	Min. Focusing Distance	1 m (3.28 ft)
	Focus Mode	Focus Free
Image Display	Visual Camera	N/A
	Display	800 × 480 Resolution, 4.3" LCD Screen
	Digital Zoom	N/A
	Color Palettes	Basic, Black Hot, White Hot, Fire Detection, Rescue, Hot Area, Cold Area, Building
Measurement and Analysis	Object Temperature Rang	-20°C to 1200°C (-4°F to 2192°F)
	Accuracy	Max. (± 2°C/3.6°F, ± 2%), for ambient temperature 15°C to 35°C (59°F to 95°F) and object temperature above 0°C (32°F)
General	LED Light	N/A
	Battery Type	Interchangeable and rechargeable Li-ion battery
	Protection Level	IP67
	Drop Test Height	2 m (6.56 ft)
	Working Temperature Range	-20°C to 50°C (-4°F to 122°F) 80°C(176°F), 40min 150°C(302°F), 15min 260°C(500°F), 7min
	Weight	Approx. 1022g (2.25 lb)

# FT31- FOR OBSERVING IN TOTAL DARKNESS AND SMOKE

Working Temperature Range:

-20°C to 50°C (-4°F to 122°F); 80°C(176°F), 40min; 150°C(302°F), 15min; 260°C(500°F), 7min

Object Temperature Range: -20°C to 1200°C (-4°F to 2192°F)



FT31



For Firefighting/ Smoke Systems



For Fire Rescue



For Building Construction

# Automation Cameras



# PRODUCT OVERVIEW



## Cube Camera

- Small size and compact design
- Magnet adapter for easy installation



## Box Camera

- Up to 21 Protocols For Integration

## Automation



## High Temperature Box Camera

- Temperature Measurement Range Up To 1800°C



## Heat Resistant Bullet Camera

- Air cooling and Liquid Cooling

## Predictive Maintenance

**Manufacturing** Automotive, Food Processing, Metal, Glass, Packaging , etc.

**Oil & Gas** Refineries, Oil Fields, Pipeline

**Electric Utilities** Generation, Transmission, Substation

# NEW PRODUCTS RELEASE— R&D Box Camera



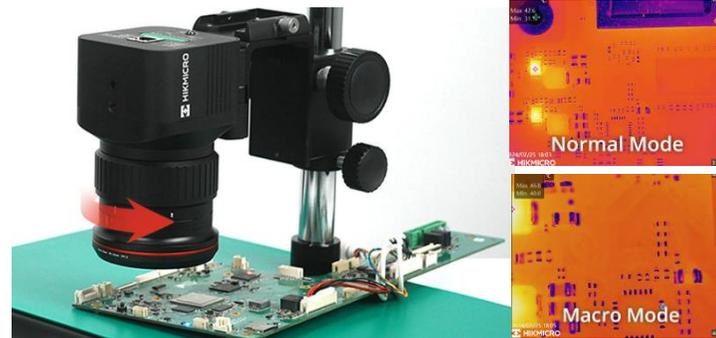
Designed for Outdoor

small size, low power consumption and simple integration

## HIKMICRO R&D Box Camera



Quick Mode Switch,  
Improve Observation Efficiency



Quick Installation & Simple Integration



Basic Parameters	HM-TD2C68E-25/Q
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Pixel Pitch	12 μm
NETD	≤ 35 mK (@25° C, F# = 1)
IFOV	0.48 mrad
Min. Focusing Distance	0.15 m
Aperture	F 1.0
Resolution	640 x 512
Object Temperature Range	Range -20°C~150°C Range 0°C~650 °C
Accuracy	Range -20~150°C: -20~100°C:±1°C 100~150°C:±1% Range 0~650°C 0~100°C:±2°C 100~650°C:±2%
Power Supply	10-30 VDC
Temp. Range	-20 °C to 50 °C (-4 °F to 122 °F)



HIKIMICRO ANALYZER  
Professional and free software that allows users to live view, edit, and analyze images.

Part 02-3

# INDUSTRIAL PRODUCTS

01 Acoustic Series



# AI Series - Overview

- The AI series is an acoustic imaging camera capable of measuring gas leaks and Partial discharge
- The AI series adds powerful features for gas leak detection (LD) and partial discharge detection (PD).
- Analyzer Acoustic software allows you to analyze data and export reports

Specifications	A156	A176
Number of Microphones	64	136
Bandwidth	0 kHz to 96 kHz, adjustable range MEMS sampling frequency: 192 kHz	
Distance	0.3m~150m	
Camera FOV	50.2° × 35.4°	
Sound Intensity Display	Peak Point	
Acoustic Image Frame Rate	25 fps	
Acoustic Image Resolution	800 × 480	
Leak Rate	>0.008 l/min @ 6 bar from 0.5 m (1.64 ft) >0.013 l/min @ 5 bar from 1 m (3.28 ft)	>0.0047 l/min @ 6 bar from 0.5 m (1.64 ft) >0.0073 l/min @ 5 bar from 1 m (3.28 ft)
Dynamic Range	Low Limit: <-15dB High Limit: >120dB	
Discharge Detection	Automatic detection 50 / 60 Hz	
Discharge Type	Corona Discharge, Particle Discharge, Floating Discharge, Surface Discharge	
Display	800 × 480 Resolution, 4.3" LCD Touch Screen	
Digital Zoom	1.0x to 16.0x continuous	



A156

A176

# AD21P - Overview

## Professional Tools For Detecting Indoor Leaks

The HIKMICRO Acoustic Leak Detector AD21P is a high-performance device designed for technicians and plumbers to find leaks in indoor plumbing, water service, and residential or commercial properties. With the new HIKMICRO SuperDetect function, the AD21P can quickly locate water leaks, and with the handheld sensor and pick-up sensor, the AD21P can meet most of the indoor water leakage detection scenarios. Furthermore, it can reducing resource waste and property loss.

Basic Parameters	AD21P
Frequency Range	150~7500Hz
<b>SuperDetect</b>	<b>Yes</b>
Amplification	Manual adjustable
Band Pass Filters	Indoor low-frequency 150Hz to 3000Hz Indoor mid-frequency 3000Hz to 6000Hz Indoor high-frequency 4500Hz to 7500Hz Indoor all-pass 150Hz to 7500Hz
Display	1024 × 600 Resolution, 7"LCD Touch Screen
Screen Brightness	Manual/Auto
Storage Media	Built-in EMMC(4GB)
Image Storage Capacity	Approx. 60,000 Images, viewable only on PC
Image Format	JPEG
Audio Storage Capacity	Approx. 10 hours, viewable only on PC
Audio File Format	.wav
Working Temperature Range	-10 °C to 50 °C (14 °F to 122 °F)
Drop Test Height	1.2 m(3.93 ft.)
Battery Type	Rechargeable Li-ion Battery
Battery Operating Time	11h
Battery Charging Time	4h to full charge
Protection Level	Main Unit:IP40; Hand held sensor:IP54; Pick-up sensor:IP66;



High-sensitivity Sensors



HIKMICRO SuperDetect



Intelligent Noise Reduction

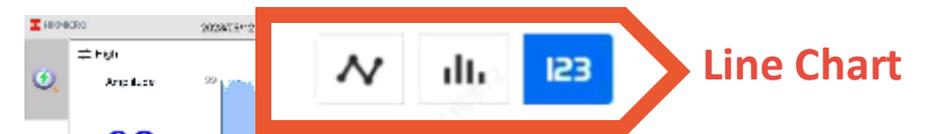
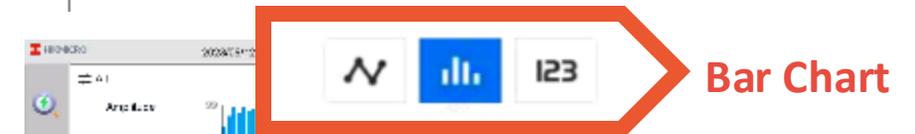
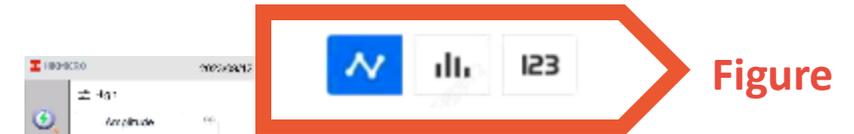
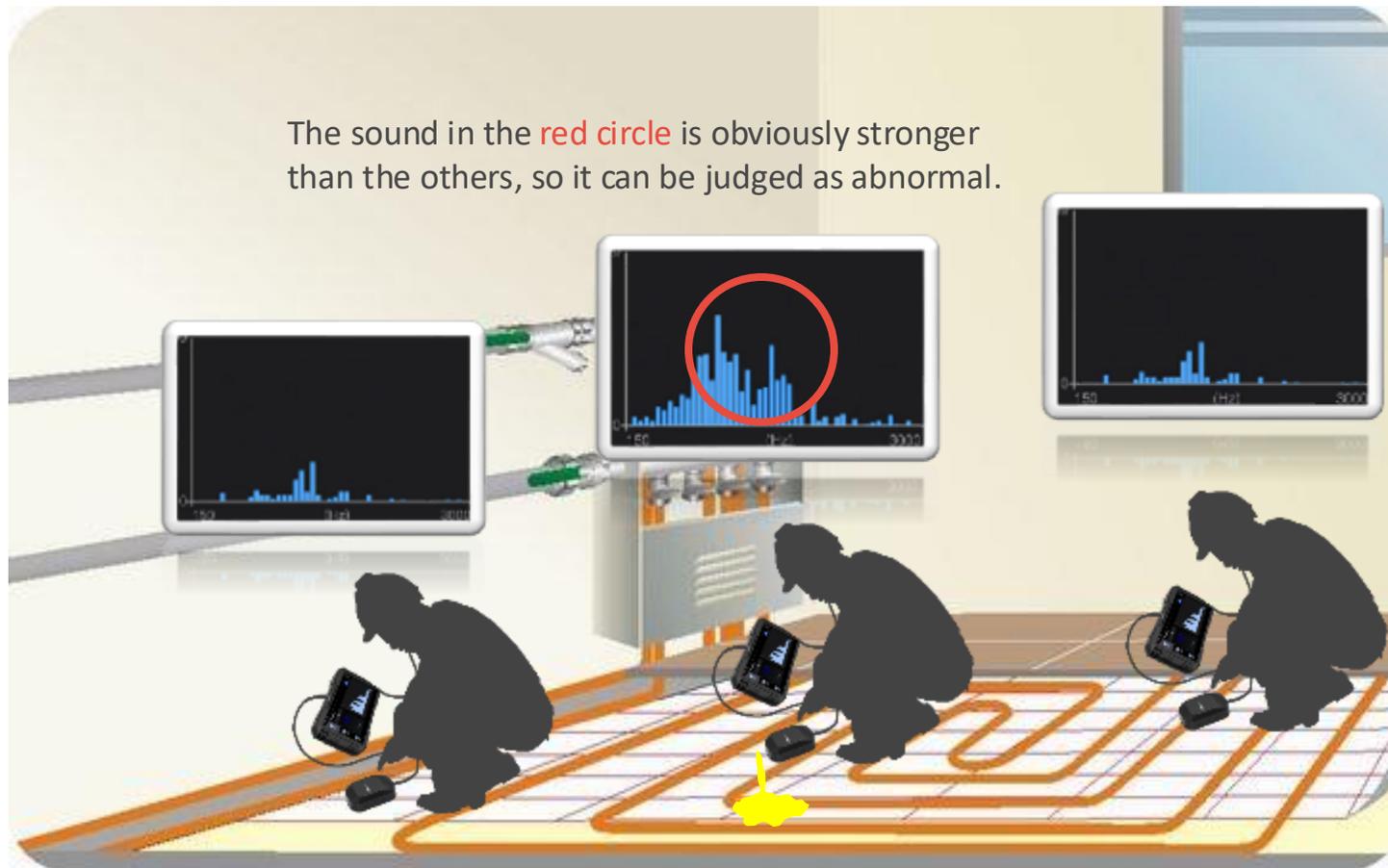


7"LCD Touch Screen

# AD21P – Two Inspection Modes For Fast Leak Location

## Quick Inspection Mode

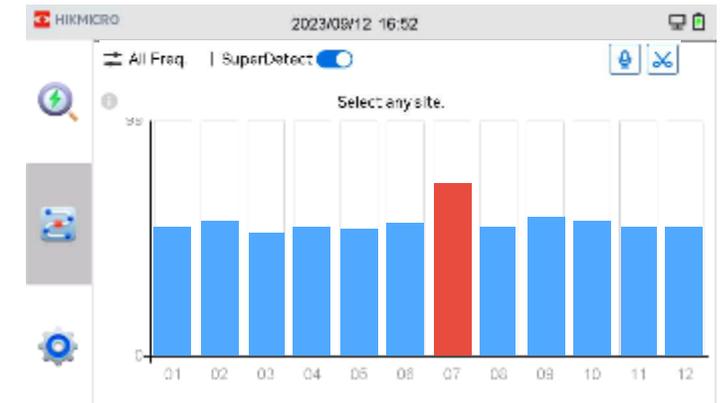
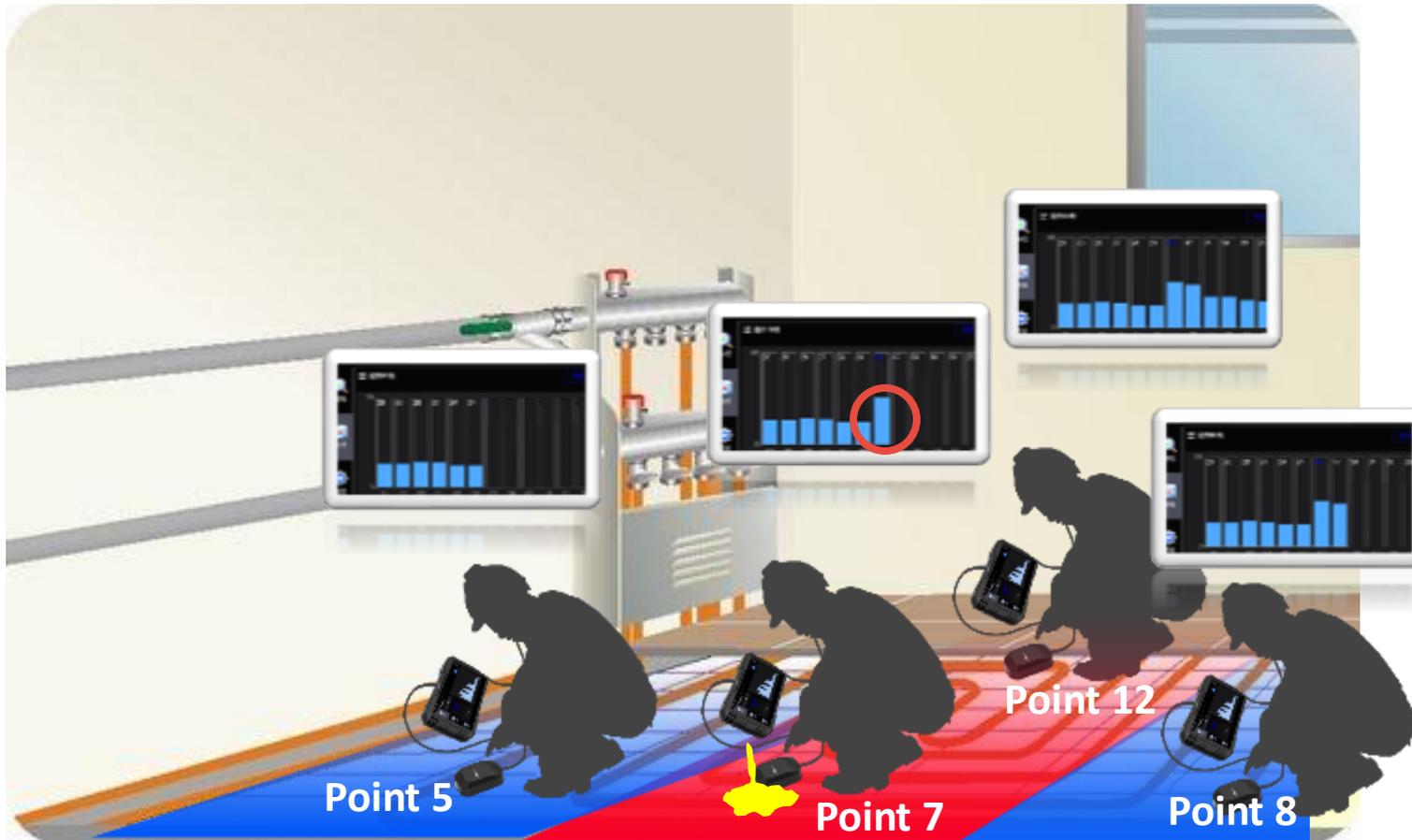
Quickly locate the scope of the leakage point, through real-time digital and image changes for investigation. It can support SuperDetect with three display modes: **figure**, **bar chart** and **line chart**, suitable for different users' habits.



# AD21P – Two Inspection Modes For Fast Leak Location

## Inspection Mode

Inspection mode can detect the floor and wall. Record the values of up to **12 areas**. After finishing the inspection, AD21P with SuperDetect will automatically determine the suspected leakage points, making the leakage detection work more accurate.



After finishing the detection, based on sound intensity, the AD21P can **automatically determine** the suspected leakage **point 7**. If a point needs to be re-measured, individual points can be re-tested or all of them can be cleared for measurement.

Part 03

# APPLICATIONS

01 BUILDING INSPECTION

02 ELECTRIC UTILITIES

03 STEEL MILL

04 AUTOMOTIVE

05 ELECTRICAL COMPONENTS

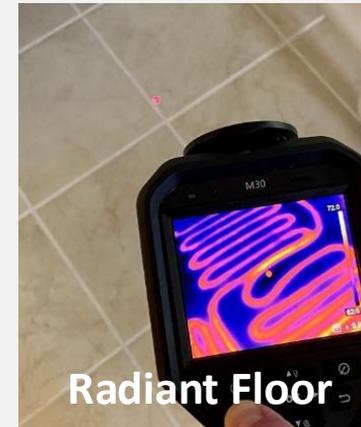
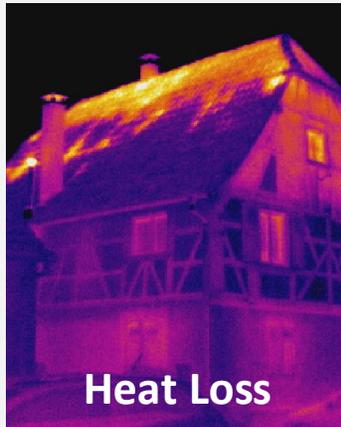
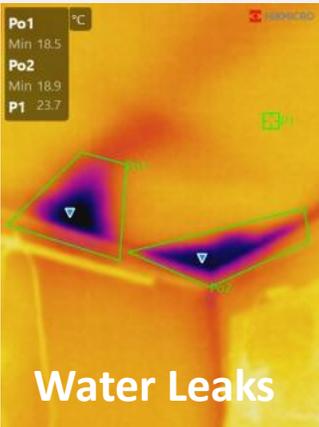
06 AUTOMATION



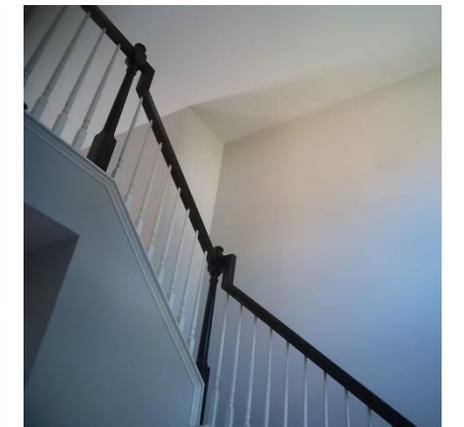
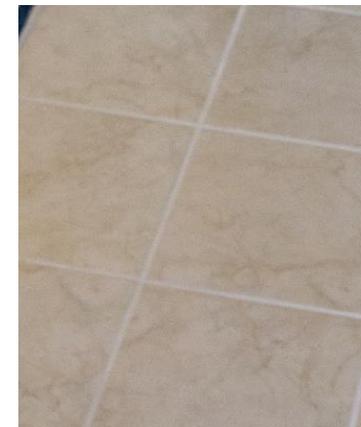
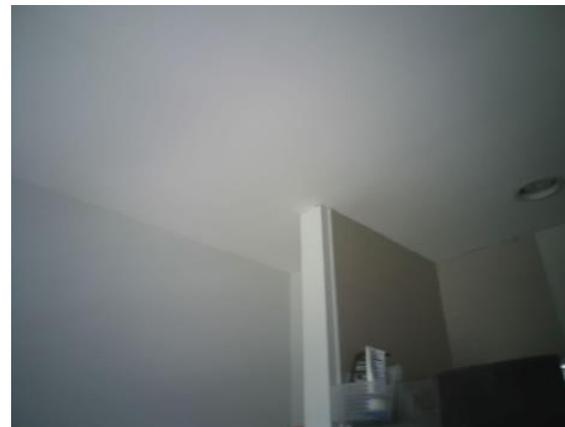
# BUILDING INSPECTION

- In building inspections, missing or damaged insulation, building envelope air leaks, and moisture intrusion can be very difficult to find before they become serious enough to damage or destroy building contents. Thermal cameras can and have been utilized in the discovery of otherwise undetectable heat, air, and moisture anomalies in all types of structures.

WHAT  
WE  
SEE



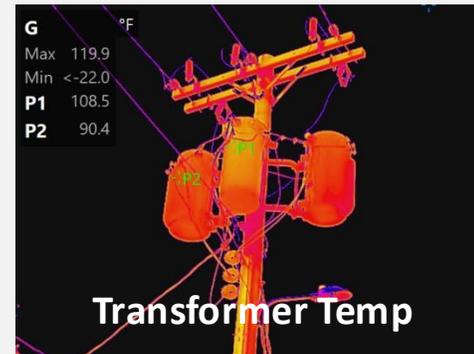
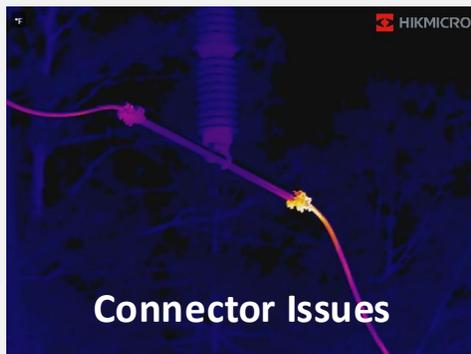
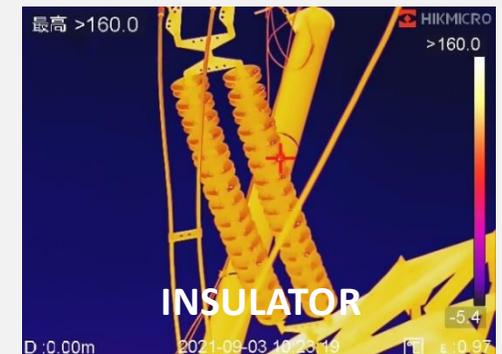
WHAT  
YOU  
SEE



# ELECTRIC UTILITIES

- Managing equipment and assets associated with the transmission and distribution of electrical energy is critical to long term system efficiency and safety. Thermal imaging enables added safety inspections, proactively inspect, monitor, and plan for routine maintenance before small issues become catastrophic.

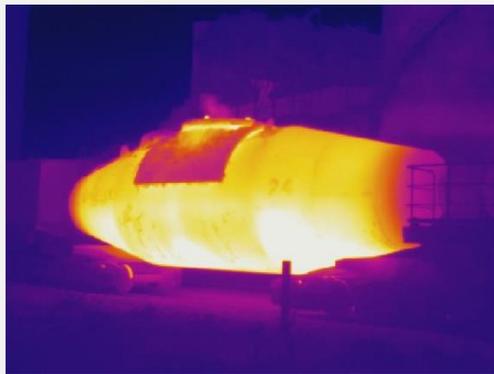
## Inspection Areas



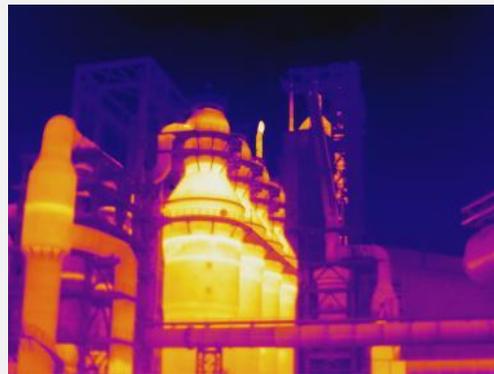
# STEEL MILL

- Preventive maintenance of ladles and torpedoes used to shuttle molten iron between steelmaking processes is essential. It would be an absolute real-life nightmare if a molten steel leak spilled molten material more than 1000°C (1832°F) through the workshop and risk damaging equipment or even worker injury or death. This is an extremely dangerous and costly mistake that steel mills try to avoid.
- The use of thermal imaging to monitor equipment such as ladles and torpedoes enables safety and efficiency to plan maintenance before disaster strikes.

TORPEDO LADLE CARS



HOT BLAST STOVE



LADLE



BLAST FURNACE



Inspection  
Areas

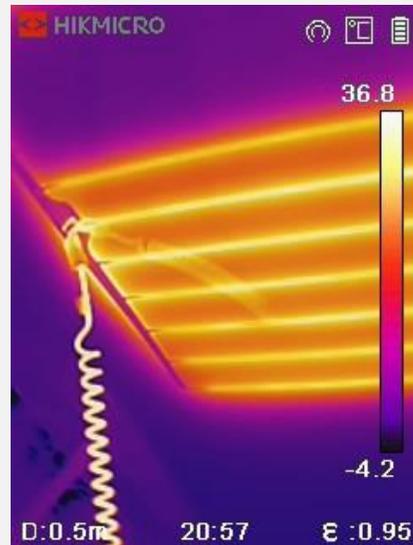
# AUTOMOTIVE

- Thermal imaging brings hidden details to the forefront and isolates the issues prior to any disassembly saving countless hours in the process. Quickly check items including passenger comfort systems, defog/deice operations, parasitic voltage draw, bearings/gears, cooling/radiators, exhaust systems, tire wear, and differences in combustion processes between cylinders.

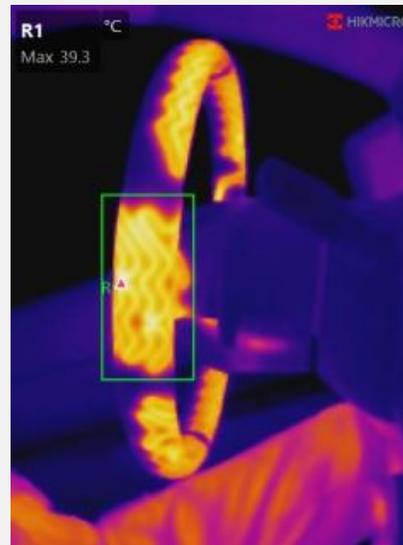
SEAT HEATER



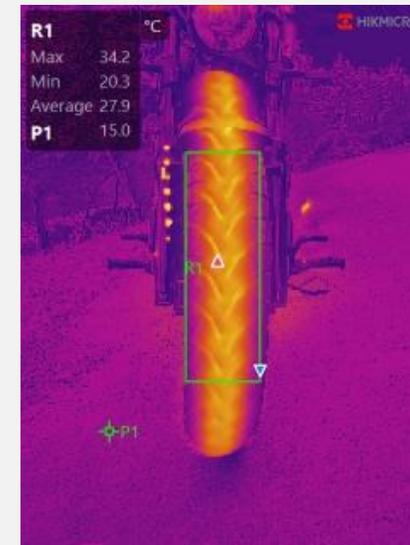
WINDOW HEATER



WHEEL HEATER



FRONT TIRE



ENGINE



See more  
with  
HIKMICRO

# ELECTRICAL COMPONENTS

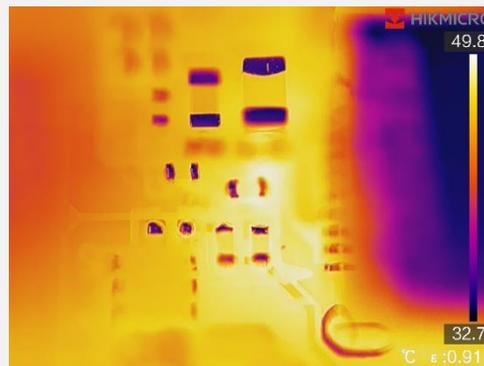
- Various types of tests and inspections are performed through traditional methods to detect defects, problems, and failures in PCBs that require improvement. But traditional methods have usually proven to be low efficiency, health hazards and complicated, and low definition.
- A thermal imager with a macro lens has proven to be an efficient and reliable tool for solving a wide range of scientific problems. A macro lens is a lens that specifically allows you to focus extremely close to a subject so that it appears large in the display (and in the final image). Get an incredibly detailed image of very small objects so you can gain insight into thermal buildup and dissipation on printed circuit boards, identify a faulty or undersized component, or potentially even pinpoint precise faulty locations on electrical equipment.

WHAT  
WE  
SEE

PCB



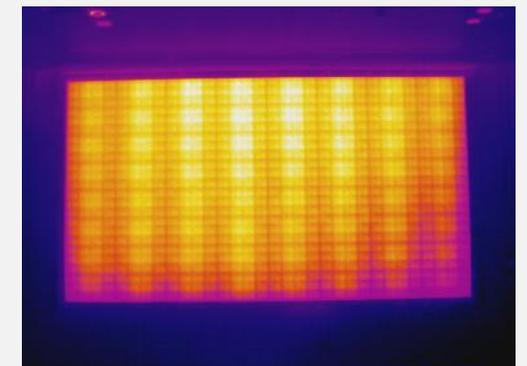
PCB



PCB



PCB

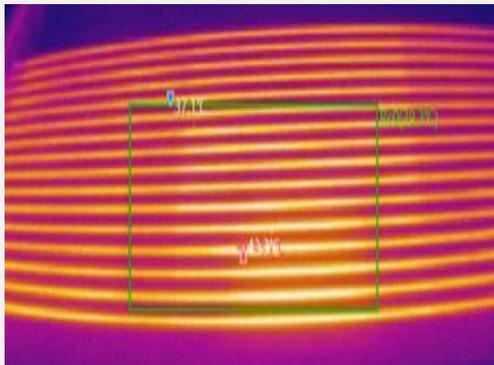


# AUTOMATION CAMERAS

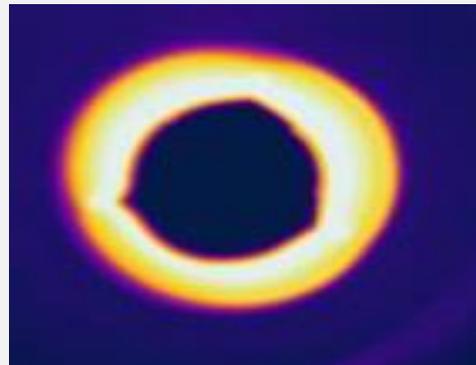


- Thermal imaging integrated into the manufacturing process serves many purposes including food safety, glass production, plastics, paper, steel, and welding processes. Though the integration, heat dependent items can be easily monitored and tracked for consistency, quality control data gathered, and if a deficiency is found, trigger an alarm or shut down the system.

GLASS PRODUCTION



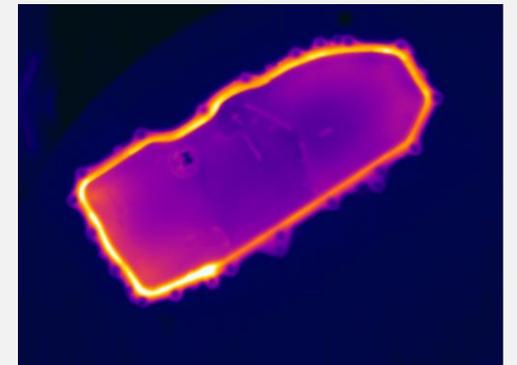
AUTOMOTIVE



METAL SMELTING



PLASMA COATING



WHAT  
**WE**  
SEE

Part 04

# MOBILE APPLICATIONS AND PC SOFTWARE

01 HIKMICRO VIEWER

02 HIKMICRO INSPECTOR

03 HIKMICRO ANALYZER

04 HIKMICRO STUDIO



# MOBILE APPLICATIONS - HIKMICRO VIEWER

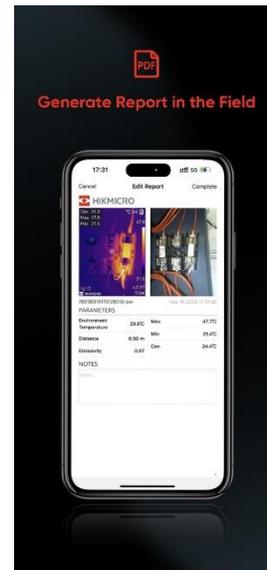
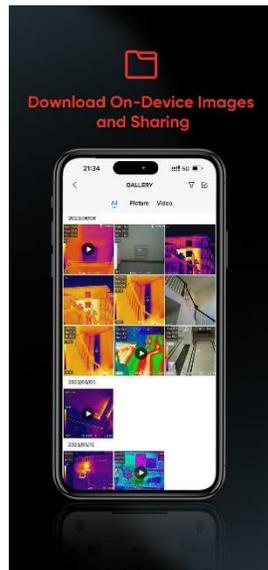


## HIKMICRO Viewer

### WIRELESS ANALYSIS, REPORTING AND SHARING

HIKMICRO Viewer App is A powerful and intuitive APP designed for industrial thermal cameras. It allows thermal inspector to view and capture live streaming infrared video and still images from select HIKMICRO thermal imaging cameras using a mobile device. With the HIKMICRO Viewer, the thermal camera can be placed in an area and operated wirelessly from a distance - helping infrared detection work safely in hard-to-reach locations and harsh work environments. Streaming video and remote access also provide opportunities for decision-makers and others on the team to observe and collaborate during IR surveys. With a powerful reports function, you can efficiently generate reports for your clients in the field.

- Free license
- Scan and Connect Easily
- Download On-Device Images and Video to share
- Live View and Remote Control
- Advanced measurement and image analysis
- Quick reporting and sharing
- Firmware Upgrade
- After-sales contacts and online support services
- Turn screen rotation on and off



Learn more:

<https://www.hikmicrotech.com/en/industrial-products/hikmicro-viewer-software/>

# PC SOFTWARE - HIKMICRO ANALYZER



HIKMICRO  
Analyzer

## EFFICIENT, POWERFUL THERMAL ANALYSIS AND REPORTING

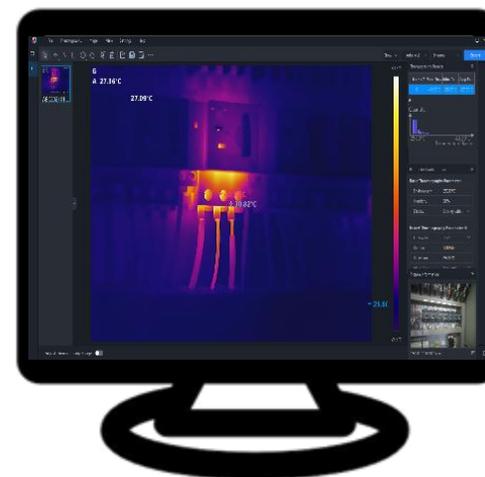
HIKMICRO Analyzer is a powerful and free licensed PC software designed to help users manage and analyze thousands of thermal images and videos and quickly create professional reports. Compatible with files from HIKMICRO handheld thermal cameras, providing the features you need to simplify your workflow and increase your productivity.

- Free license
- Import, edit and manage files
- View, edit and analysis radiometric images and videos
- Advanced measurement and image analysis
- Batch processing with all image and measurement controls
- Quick reporting with pre-defined or customized templates

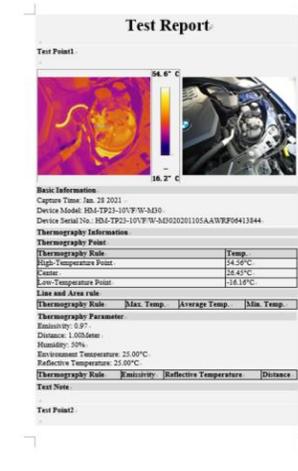
### THERMAL IMAGE ON SITE



### ANALYSIS ON COMPUTER



### EXPORT REPORT



Download at:

<https://www.hikmicrotech.com/en/industrial.html>



# PC SOFTWARE - HIKMICRO STUDIO



HIKMICRO  
STUDIO

A professional software client designed to manage the fixed and handheld thermal cameras.

Live view

Alarm notifications

Remote image settings

Temperature Data Storage & Report

Real-time temperature data

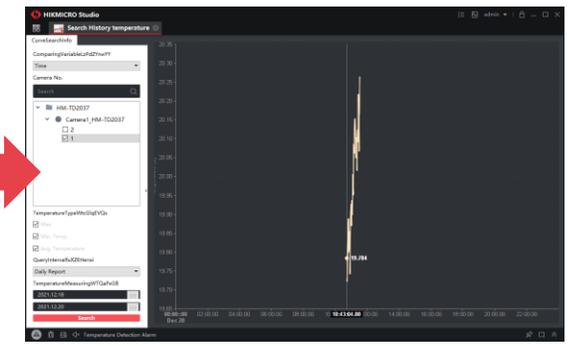
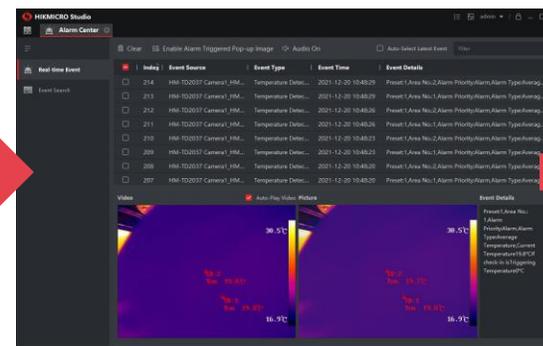
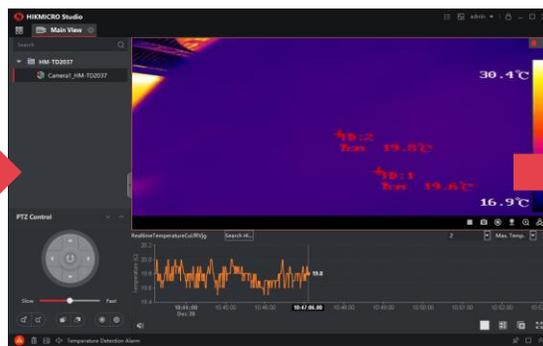
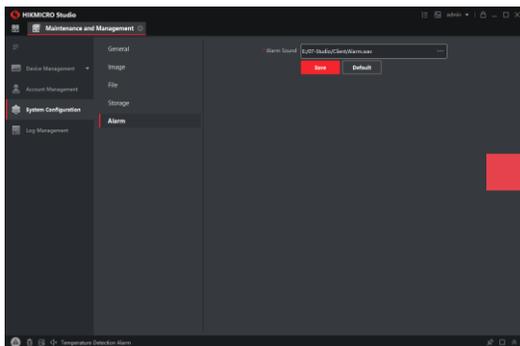


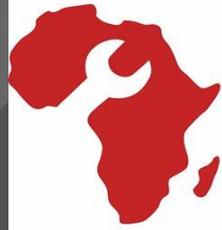
Alarm audio file

Main View

Alarm Center

Search History Temperature





**AKEENAH  
GROUP LTD**

Africa's Trusted  
Procurement Company

# THANK YOU

See the World in a New Way



Akeenah Akeenah



akeenahgroupLtd



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[salesdrc@akeenahgroup.com](mailto:salesdrc@akeenahgroup.com)

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