



# HIKMICRO **M** SERIES PRODUCT INTRODUCTION

Advanced thermal imaging camera with full function analysis.

INDUSTRIAL PRODUCT | 2023.Q3



# PRODUCT CATEGORY



Thermal

## Handheld



## Fixed



## Firefighting

New



## Explosion-proof

New



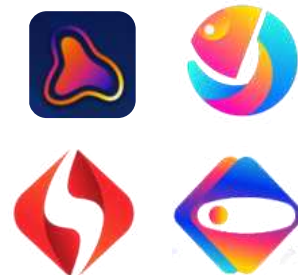
Acoustic

## Acoustic

New



## Software



# PRODUCT MATRIX - HANDHELD



## Entry & Middle level

- 256



Mini2Plus:  
Manual Focus



Mini2:  
Focus Free

### Mini Series

Smartphone  
Attachment for  
Android

- 96 / 160 / 192
- Focus Free



### Eco Series



### E Series

- 192 / 256
- Wi-Fi
- Focus



### B Series



### Pocket Series

## Middle & High-end Level

- 192 / 256 / 384 / 640
- Wi-Fi
- Manual Focus
- Removable Batteries /Memory Card



### M Series

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



### G Series

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



### SP Series

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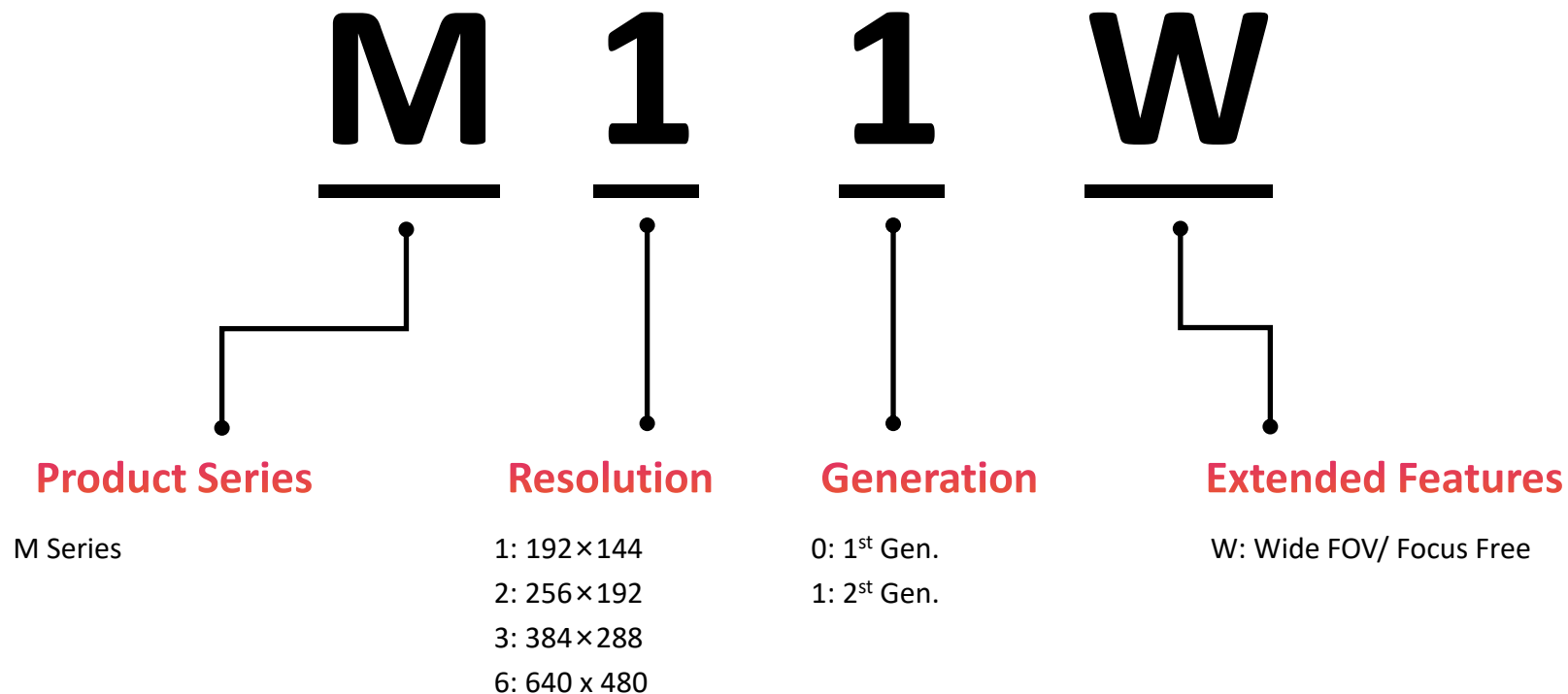
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# M Series - Product Naming



M11 / M11W   M20 / M20W   M30   **M60**

**NEW**

# M Series – Form Factor



Microphone & Speaker for voice annotation and playback

3.5" High Resolution Sunlight Viewable Touch Screen

Keypad Controls for use with Gloves or PPE

Rugged Design with 2m Drop Test and IP54 Water & Dust Protection

Interchangeable and Rechargeable Li-ion Battery System for up to 12 hours of runtime

# M Series – Form Factor



Lens Cap, Removable Micro SD Card, and USB-C Connection

8 MP Visual Camera, LED Lamp for lighting dark environments, & Laser Pointer.

Up to 384x288(110,592) Thermal Resolution

Trigger for 1 Click Thermal and Visual Image Storage and Video Start/Stop

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# M Series - Overview



Basic Parameters	M11	M11W	M20W	M20	M30	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)				< 35 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°	37.5° × 28.5 °	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

# 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	M30	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°	37.5° × 28.5°	41.9° × 33.3°
Min. Focusing Distance	0.1 m (0.33 ft)	0.1 m (0.33 ft)	0.2 m (0.65 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		

# M Series - SuperIR



Powered by HIKMICRO SuperIR image enhancement technology, images are upscaled 4X to deliver highly detailed live and recorded radiometric images for inspection and reporting.

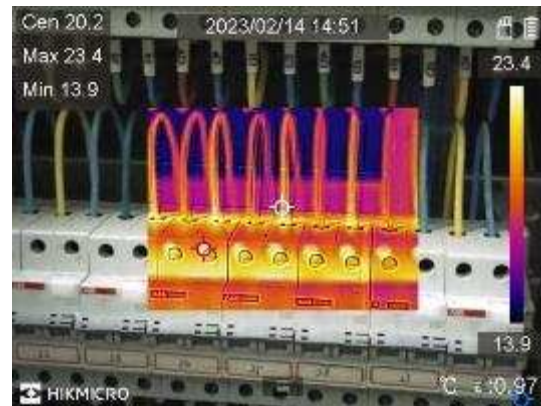
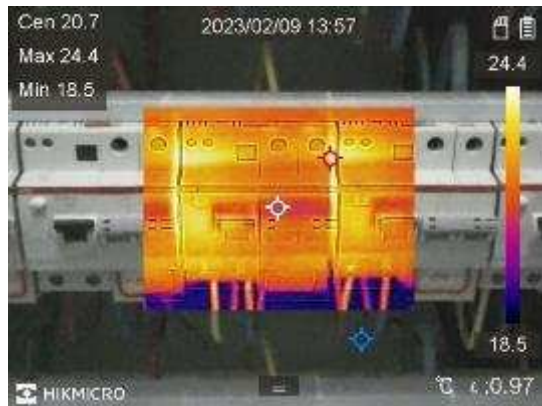


\* Above images captured by M60

# M Series – Visual Imagery

**Visual images provide additional details including:**

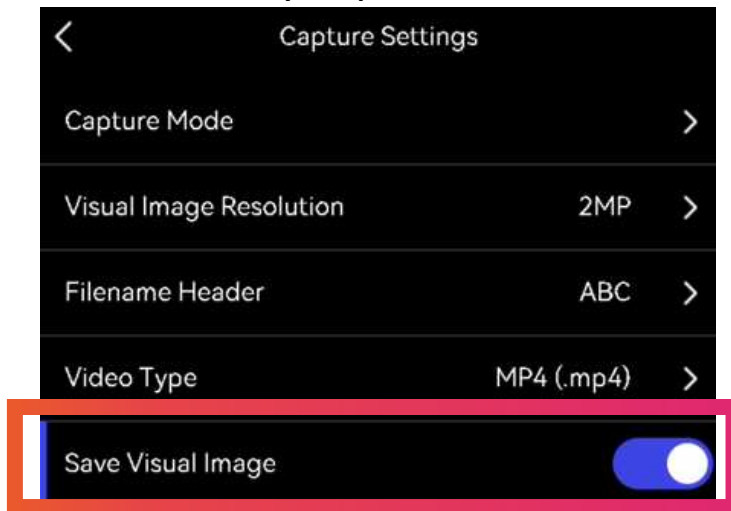
- Part numbers
- Component or equipment type
- Reference location
- Damage to finish materials from underlying issues



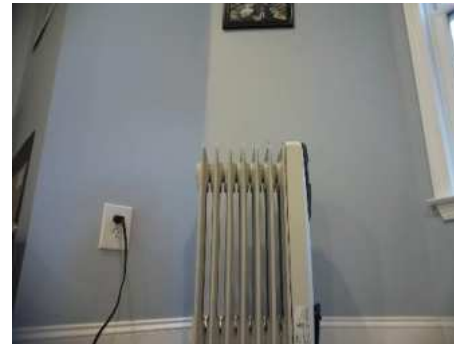
# M Series - Valuable Visual Image

No need to carry a second traditional camera when performing inspections.

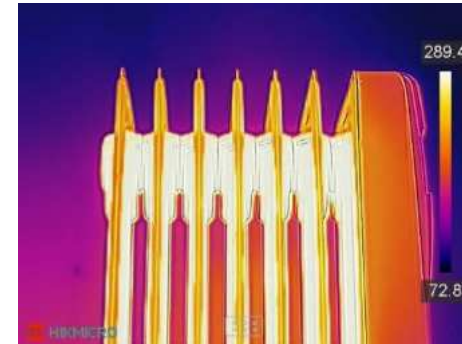
- Automatically captured with thermal



- Easy to understand file structure



HM2022XXXX.VIS



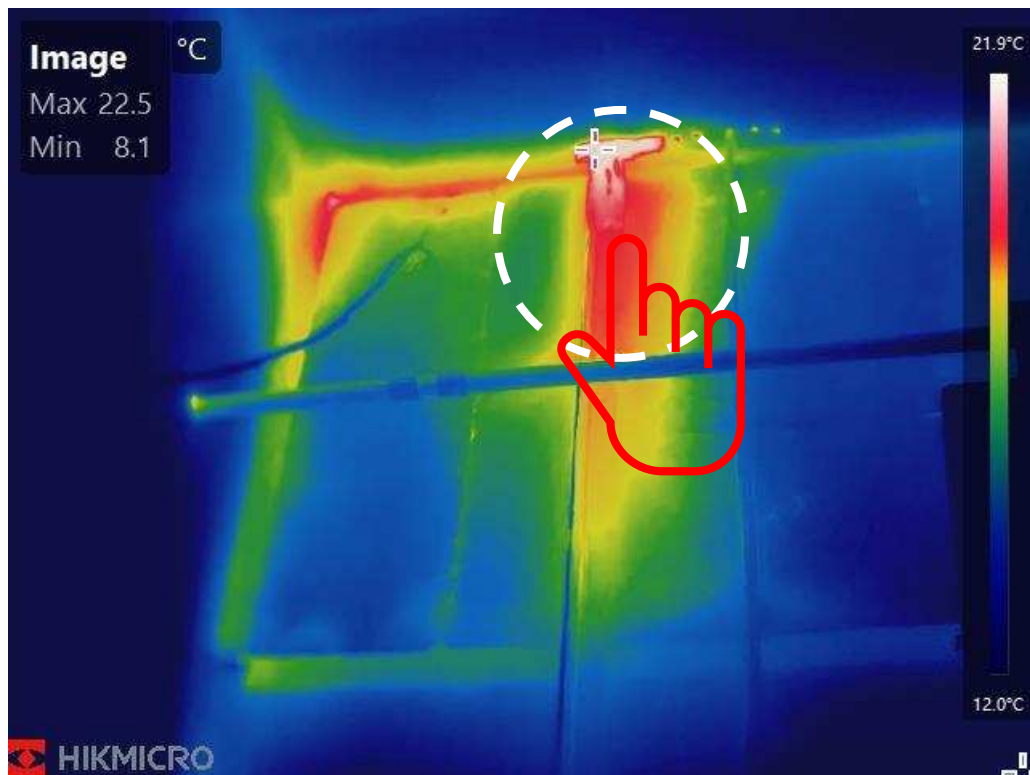
HM2022XXXX

- A LED light illuminates areas in darkness

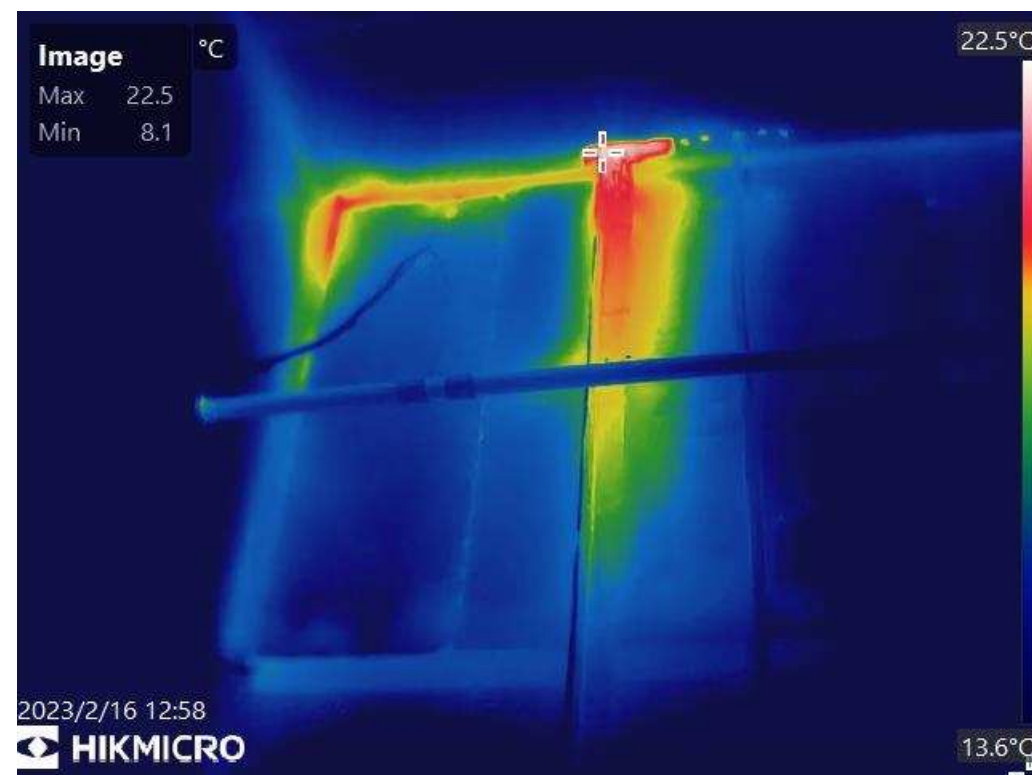


# M Series - 1-Tap Level & Span

Quickly highlights the area of the image you are interested in by narrowing the span with one tap on the 3.5" LCD touchscreen, instantly improving image contrast and highlighting potential problems.



1-Tap  
→



# M Series - Complete Image Annotations

Support voice, text, and QR Code Scan annotations, helping to improve inspection efficiency and productivity.



M11W

Voice Note

Max. 60 Seconds  
Audio annotations

M11W

Text Note

see the world in a new way

Max. 200 Characters  
Text annotations

HIKMICRO



Measurements	Image Parameters
Image/Max. Temp. 22.8°C	Distance 0.9m
Image/Min. Temp. 19.2°C	Humidity 42%
	Clarity 0.97
	Reflected Temp. 25.0°C
	Atmosphere Temp. 18.7°C

Device Information

Device Model M11W

Device Serial No. 117543008

Captured At 2023-02-21 14:49:37

Text Annotation

see the world in a new way

Report Document  
With voice and text note

M30

Create Asset ID

28.9

23.5



# M Series - Laser Pointer

The Laser Pointer helps show the position of the center point on actual object.



# M Series - Interchangeable Battery System

Includes **2** interchangeable Li-ion batteries and a dual bay charger to provide you with **up to 12 hours** of operation. You can stay powered up for even the longest inspections.



**2 Interchangeable and Rechargeable Li-ion Batteries**



**4 International Use Plugs**  
(US/EU/UK/AU) for Power Supply



Basic Parameters	M11	M11W	M20W	M20	M30	M60
Battery Life	6 hours x 2	6 hours x 2	6 hours x 2	6 hours x 2	4 hours x 2	4 hours x 2

# M Series - Easy to Download Images

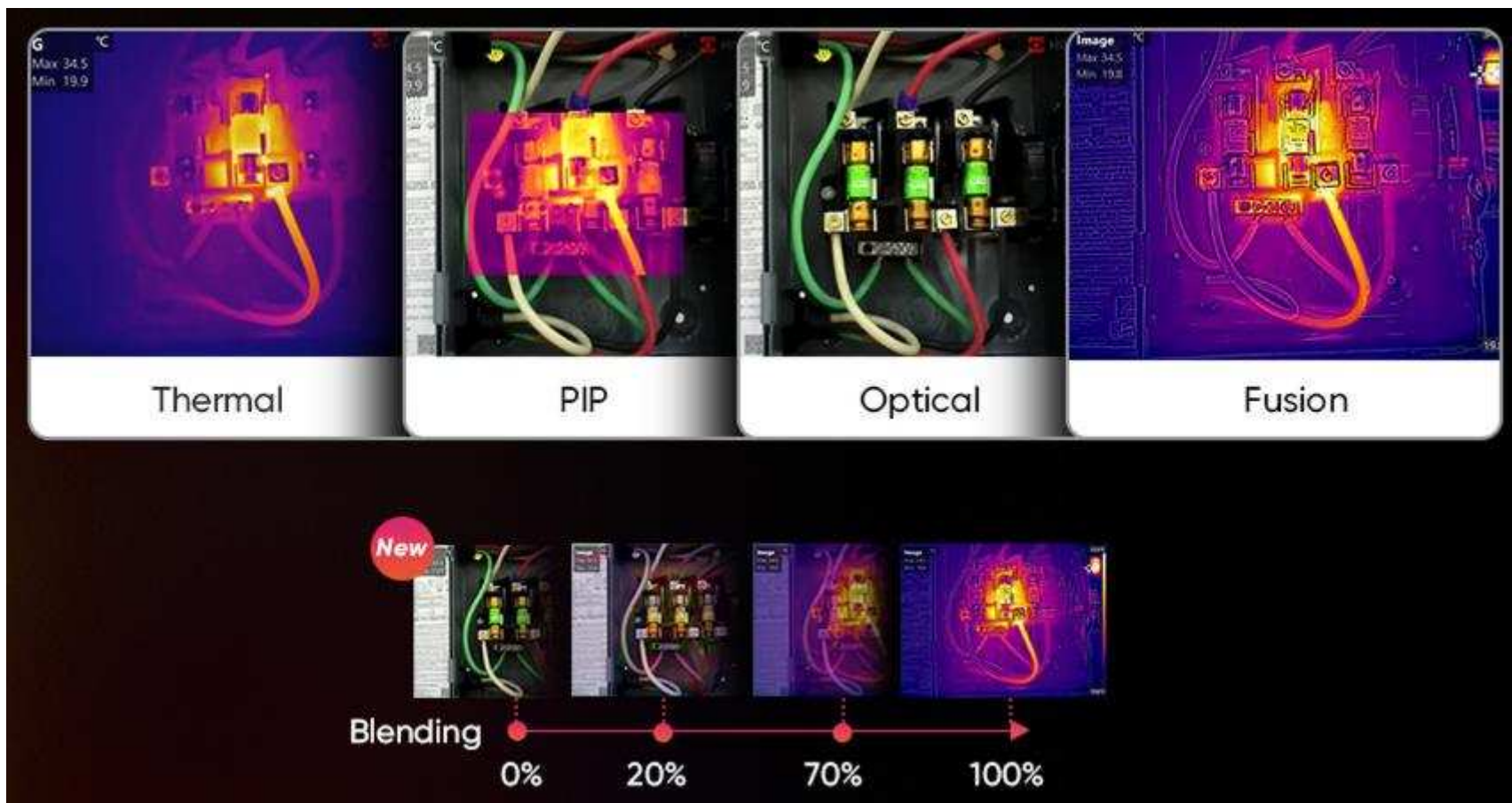
Provide 3 ways to download images (Visual & Thermal) off of the camera for reporting

- Wireless via the HIKMICRO Viewer app
- USB cable to computer
- Remove SD Card



# M Series - 5 Image Modes

Thermal, Fusion, PIP, Blending and Optical modes to suit your preferred view



# M Series - On-camera Analysis

Offers 17 measurement rules, 7 color alarm palettes and 5 image modes for powerful on-camera analysis.



**5 Image Modes**



**17 Measurement Rules**

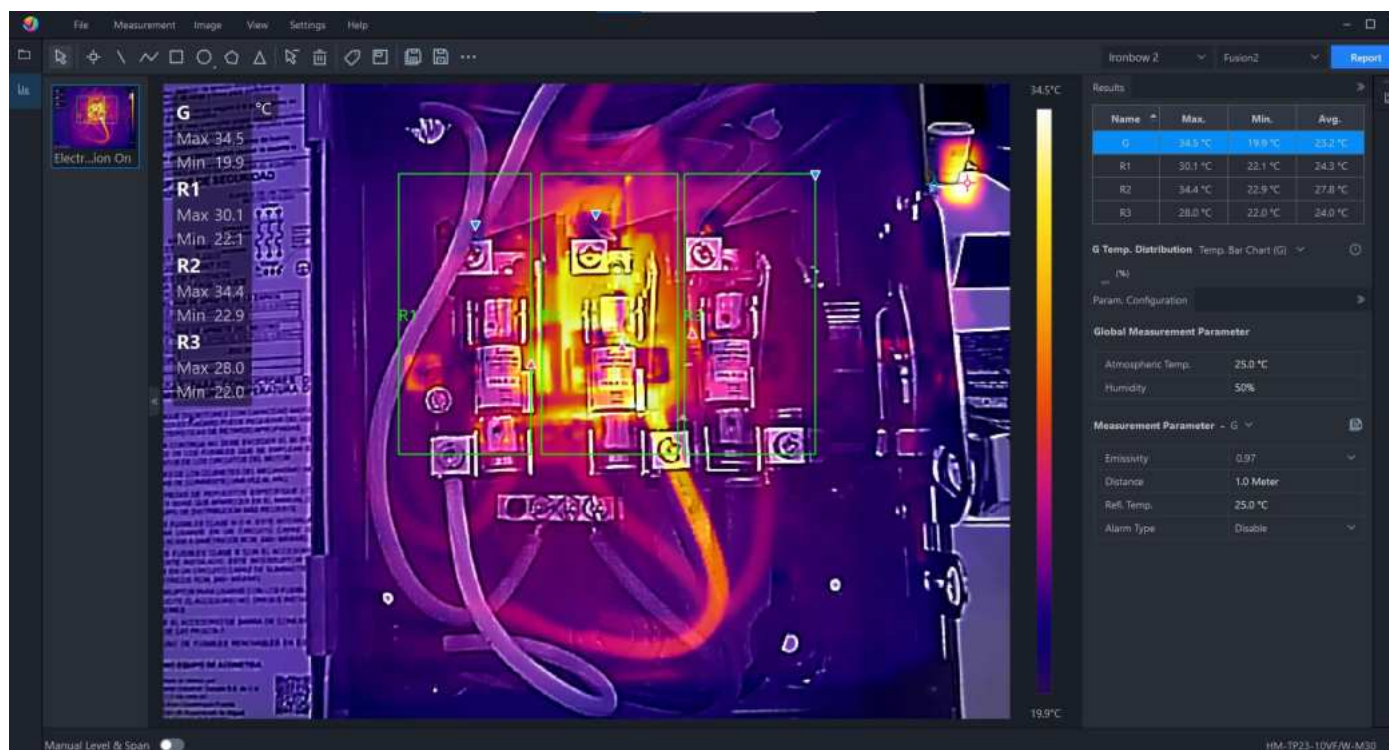


**7 Color Alarm Palettes**



# M Series - Radiometric Video Analysis

Supports recording of radiometric video in camera SD card storage, including all temperature data, for post analysis on PC software. Works seamlessly with HIKMICRO Analyzer software for intuitive viewing, advanced analysis and processing of thermal data.



**HIKMICRO Analyzer**

Only M30

# M Series - Key Features

## Rugged & Durable Design

IP54 rated for protection against water and dust. Featuring 2-meter (6.6ft) drop protection, suitable for industrial use.

## Conveniently Share Images and Reports

Connect HIKMICRO Viewer App via Wi-Fi to transfer photos or videos from camera to mobile device. Analyze, share images, and generate reports in real-time on-site.

## LED Flashlight

The LED flashlight allows you to work safely in dim or dark environments.

## High Capacity Storage

Provides a standard memory SD card up to 64 GB (expandable up to 128 GB) that can store at least 100,000 images or 54 hours of video recording.

Basic Parameters	M11	M11W	M20	M20W	M30	M60
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	
Image Storage Capacity	Approx. 60,000 Images				Approx. 100,000 Images	Approx. 35,000 Images
Video Storage Capacity	Approx. 15 hours				Approx. 54 hours	

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# M Series - Application

## Users and Benefits



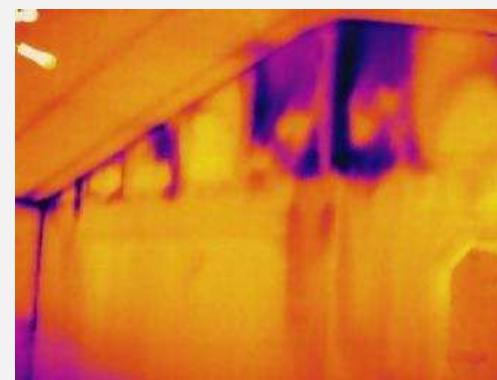
### Check Electrical

Predictive Maintenance  
Technicians



### Check Underfloor Heating

Building Maintenance  
Technicians



### Check Insulation Condition

Building Maintenance  
Technicians

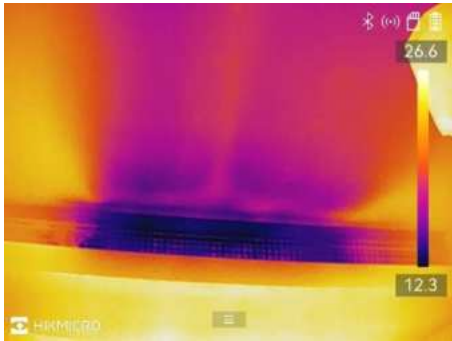


### Check Mechanical Status

First Level Maintenance

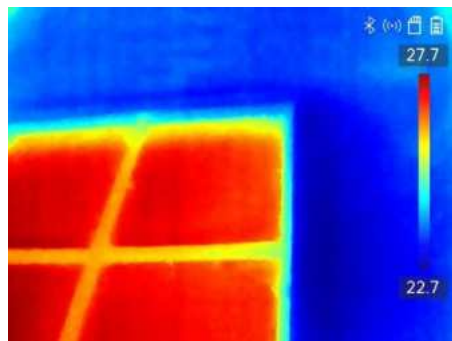
# M Series - Application

## 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.

## 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.



## Mechanical Predictive Maintenance

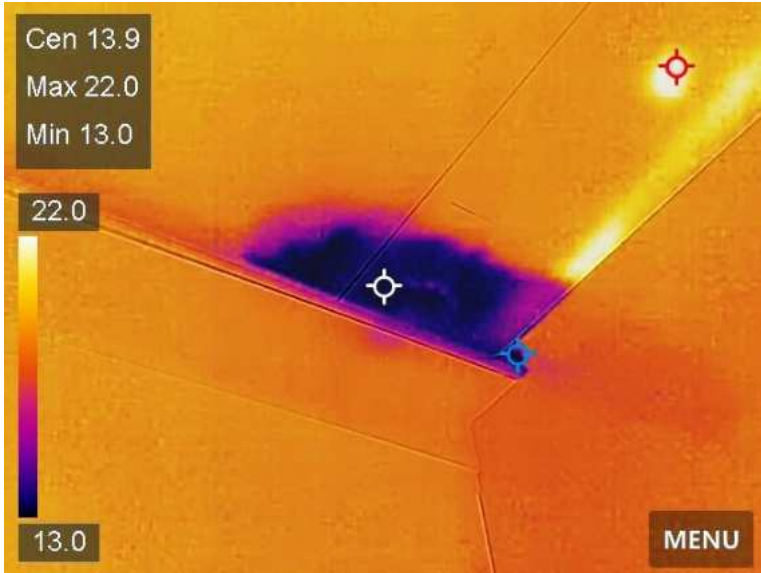
Thermal imaging is great for spotting a lack of uniformity in equipment by indicating hot and cold spots in surface temperature, through infrared image capture. Heat is often an early symptom of equipment damage or malfunction, making it important to monitor preventive maintenance programs. Monitoring 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.

## 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.

# M Series - Application

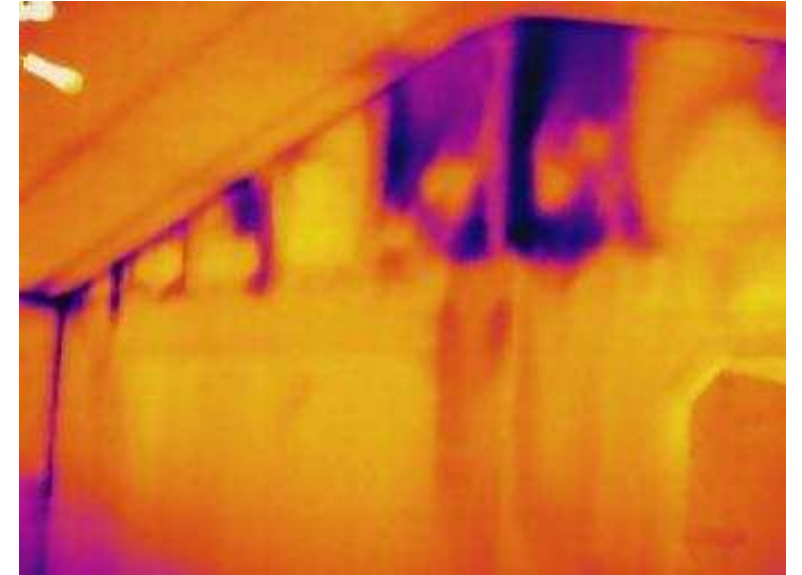
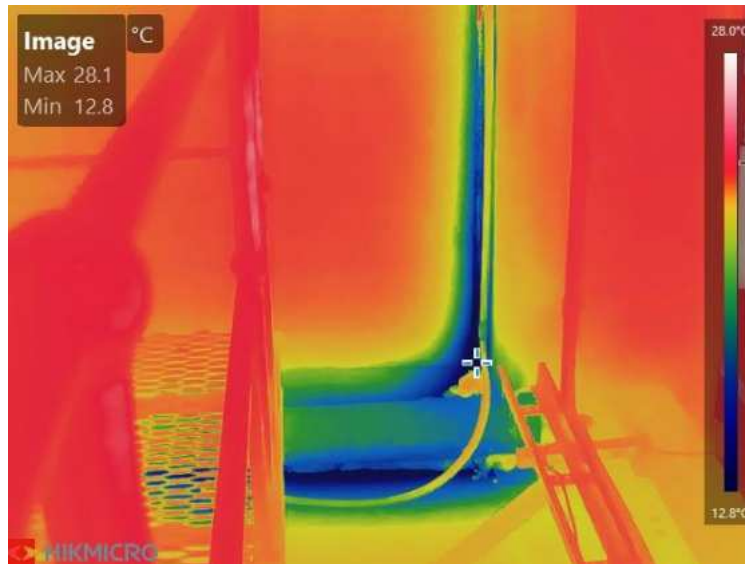


## Water Leak Inspection

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.

## 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.



## 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.

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# M Series - Scope Of Delivery



Accessories	Items	Quantity
Device	Thermal Imager	1
Straps	Wrist Strap for Thermal Imager	1
	Shoulder Strap for Hard Carrying Case	1
Batteries and Power	Interchangeable and Rechargeable Li-ion Batteries	2
	Power Supply for Battery Charger	1
	Two-bay Battery Charger	1
	International Use Plugs (US/EU/UK/AU) for Power Supply	4
Cables	USB 2.0 A to USB Type-C Cable	1
Cases and Pouches	Hard Carrying Case	1
Manuals	Calibration Certificate	1
	Quick Start Guide (Baseline) User Manual	1
Storage	16 GB Micro SD card (M11/M11W/M20/M20W) 64 GB Micro SD card(M30/M60)	1

# M Series - Optional Accessories

## M Series Power



### Replacement Battery

( E097-13-1S1P26650 )

- 5000 mAh, 3.7 V



### Replacement 2-Bay Battery Charger

( HM-5202ZC )

- Input 100~240 V / 0.7 A
- Output 12 V / 2 A

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

## All Series



### Pouch

( HM-SP01-POUCH )

- 100% Polyester
- 27.5 cm c 13 cm × 21 cm  
(10.8" × 5.1" × 8.3")

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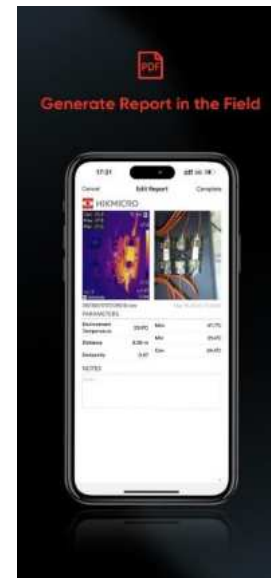
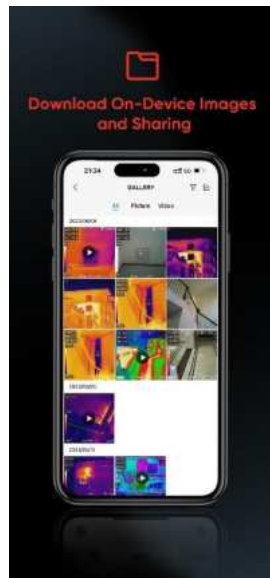
# Applications - HIKMICRO Viewer



## 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/>



# Software - 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.

### Capture Field Images



### Powerful Analysis Tools



### Generate Multi-page Reports



- 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

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# M11W – Competitive Analysis

FEATURE/PRODUCT	HIKMICRO M11W	FLIR E5 XT	Fluke TiS20+	Fluke TiS20+ Max
				
<b>Thermal Resolution</b>	192 × 144 (27,648 pixels)	160 × 120 pixels	120 x 90 (10,800pixels)	120 x 90 (10,800pixels)
<b>SuperIR</b>	384 × 288 (110,592 pixels)	N/A	N/A	N/A
<b>Temperature Range</b>	-20 °C to 550 °C (-4 °F to 1022 °F)	-20°C to 400°C (-4°F to 752°F) in two ranges	TiS20+: -20 °C to 150 °C (-4°F to 302°F)	-20 °C to 400°C (-4°F to 752°F)
<b>Accuracy</b>	Max (±2°C/3.6°F, ±2%), for the ambient temp. 15°C to 35°C (59°F to 95°F) and object temp. above 0°C (32°F)	±2°C (±3.6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (50°F to 95°F) and object temperature above 0°C (32°F)	Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater.	Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater.
<b>Field of View</b>	37.2° x 27.8°	45° × 34°	50° H x 38° V	50° H x 38° V
<b>Focus</b>	Focus free	Focus free	Focus free	Focus free
<b>Frame Rate</b>	25Hz	9 Hz	9 Hz	9 Hz
<b>NETD</b>	< 40mK	<100 mK	60 mK	60 mK
<b>Display</b>	640 × 480 Resolution, 3.5" LCD Touch Screen	3.0 in. 320 × 240 color LCD	320 x 240 LCD, 3.5" LCD touchscreen	320 x 240 LCD, 3.5" LCD touchscreen
<b>Measurement Rules</b>	Center Spot, Hot Spot, Cold Spot User-definable: 10 spots, 1 line, 5 rectangles, and 5 circles	Center spot; box with min./max.	Max/Min/Center	Max/Min/Center
<b>Wifi</b>	Yes	Yes	No	No
<b>Battery Operating Time</b>	Approx. 6 hours	4 hours	5 hours	5 hours
<b>Warranty</b>	3 Years	2 Years	2 Years	2 Years






# M20 – Competitive Analysis

FEATURE/PRODUCT	HIKMICRO M20	Fluke TiS55+
		
<b>Thermal Resolution</b> SuperIR	256 × 192 (49,152 pixels) <b>512 × 384 (196,608 pixels)</b>	256 x 192 (49,152 pixels) N/A
<b>Temperature Range</b>	-20 °C to 550 °C (-4 °F to 1022 °F)	-20 °C to 550 °C (not calibrated below -10 °C)
<b>Accuracy</b>	Max ( $\pm 2^{\circ}\text{C}/3.6^{\circ}\text{F}$ , $\pm 2\%$ ), for the ambient temp. 15°C to 35°C (59°F to 95°F) and object temp. above 0°C (32°F)	$\pm 2^{\circ}\text{C}$ or 2 % (whichever is greater) at 25 °C ambient temperature
<b>Field of View</b>	<b><math>25^{\circ} \times 18.8^{\circ}</math></b>	$28^{\circ} \times 20^{\circ}$
<b>Focus</b>	Manual Focus	Manual focus
<b>Frame Rate</b>	<b>25 Hz</b>	9 Hz or 27 Hz models
<b>NETD</b>	$< 40 \text{ mK (@ } 25^{\circ}\text{C, F\#}=1.0)$	40mk
<b>Display</b>	640 × 480 Resolution, 3.5" LCD Touch Screen	3.5" (8.9 cm landscape) touchscreen 640 x 480 LCD
<b>Measurement Rules</b>	<b>Center Spot, Hot Spot, Cold Spot</b> <b>User-definable: 10 spots, 1 line, 5 rectangles, and 5 circles</b>	3 user-adjustable rectangles. Size and position are adjustable. Rectangle statistics shown on screen: Min, Max, Average temperature.
<b>Wifi</b>	Yes	Yes
<b>Battery Operating Time</b>	<b>Approx. 6 hours</b>	3.5 hours
<b>Warranty</b>	<b>3 Years</b>	2 Years

# M20W – Competitive Analysis

FEATURE/PRODUCT	HIKMICRO M20W	FLIR E6 XT
		
<b>Thermal Resolution</b>	256 × 192 (49,152 pixels)	240 × 180 pixels
<b>SuperIR</b>	512 × 384 (196,608 pixels)	N/A
<b>Temperature Range</b>	-20 °C to 550 °C (-4 °F to 1022 °F)	-20°C to 550°C (-4°F to 1022°F) in two ranges
<b>Accuracy</b>	Max (±2°C/3.6°F, ±2%), for the ambient temp. 15°C to 35°C (59°F to 95°F) and object temp. above 0°C (32°F)	±2°C (±3.6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (50°F to 95°F) and object temperature above 0°C (32°F)
<b>Field of View</b>	50° × 37.2°	45° × 34°
<b>Focus</b>	Focus Free	Focus free
<b>Frame Rate</b>	25 Hz	9 Hz
<b>NETD</b>	< 40 mK (@ 25 °C, F#=1.0)	<60 mK
<b>Display</b>	640 × 480 Resolution, 3.5" LCD Touch Screen	3.0 in. 320 × 240 color LCD
<b>Measurement Rules</b>	Center Spot, Hot Spot, Cold Spot User-definable: 10 spots, 1 line, 5 rectangles, and 5 circles	Center spot; box with min./max.
<b>Wifi</b>	Yes	Yes
<b>Battery Operating Time</b>	Approx. 6 hours	4 hours
<b>Warranty</b>	3 Years	2 Years

# M30/M60 – Competitive Analysis

FEATURE/PRODUCT	HIKMICRO M30	HIKMICRO M60	FLIR E8	FLIR E8 Pro	TiS75+
					
<b>Thermal Resolution</b>	384 x 288 (110,592 pixels)	640 x 480 (307,200 pixels)	320 x 240 pixels	320 x 240 (76,800 pixels)	384 x 288 (110,592 pixels)
<b>SuperIR</b>	768 x 576 (442,368 pixels)	1280 x 960 (1,228,800 pixels)	N/A	N/A	N/A
<b>Temperature Range</b>	-20 °C to 550 °C (-4 °F to 1022 °F)	-20 °C to 650 °C (-4 °F to 1202 °F)	-20°C to 550°C (-4°F to 1022°F) in two ranges	-20°C to 550°C (-4°F to 1022°F) in two ranges	-20 °C to 550°C (not calibrated below -10 °C)
<b>Accuracy</b>	Max ( $\pm 2^{\circ}\text{C}/3.6^{\circ}\text{F}$ , $\pm 2\%$ ), for the ambient temp. 15°C to 35°C (59°F to 95°F) and object temp. above 0°C (32°F)	Max ( $\pm 2^{\circ}\text{C}/3.6^{\circ}\text{F}$ , $\pm 2\%$ )	$\pm 2^{\circ}\text{C}$ ( $\pm 3.6^{\circ}\text{F}$ ) or $\pm 2\%$ of reading, for ambient temperature 10°C to 35°C (50°F to 95°F) and object temperature above 0°C (32°F)	$\pm 2^{\circ}\text{C}$ ( $\pm 3.6^{\circ}\text{F}$ ) or $\pm 2\%$ of reading, for ambient temperature 10°C to 35°C (50°F to 95°F) and object temperature above 0°C (32°F)	$\pm 2^{\circ}\text{C}$ or 2 % (whichever is greater) at 25 °C ambient temperature
<b>Field of View</b>	37.5° x 28.5°	41.9° x 33.3°	45° x 34°	33° x 26°	42° x 30°
<b>Focus</b>	Manual Focus	Manual Focus	Focus free	Focus free	Manual focus
<b>Frame Rate</b>	25 Hz	25 Hz	9 Hz	9 Hz	9 Hz or 27 Hz models
<b>NETD</b>	< 35 mK (@ 25 °C, F#=1.0)	< 35 mK (@ 25 °C, F#=1.0)	<0.05°C (0.09°F) / <50 mK	<0.05°C (0.09°F) / <50 mK	40mk
<b>Display</b>	640 x 480 Resolution, 3.5" LCD Touch Screen	640 x 480 Resolution, 3.5" LCD Touch Screen	3.0 in. 320 x 240 color LCD	3.5 in, 640 x 480 color LCD, Touch screen	3.5" (8.9 cm landscape) touchscreen 640 x 480 LCD
<b>Measurement Rules</b>	Center Spot, Hot Spot, Cold Spot. User-definable: 10 spots, 1 line, 5 rectangles, and 5 circles	Center Spot, Hot Spot, Cold Spot User-definable: 10 spots, 1 line, 5 rectangles, and 5 circles	Center spot; box with min./max.	Center spot; box with min/max	5 user-adjustable rectangles. Size and position are adjustable. Rectangle statistics shown on screen: Min, Max, Average temperature.
<b>Wifi</b>	Yes	Yes	Yes	Yes	Yes
<b>Battery Operating Time</b>	Approx. 4 hours	Approx. 4 hours	Approx. 4 hours	Approx. 4 hours	3.5 hours
<b>Warranty</b>	3 Years	3 Years	2 Years	2 Years	2 Years

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COMPARISON(Internal Use

Only)

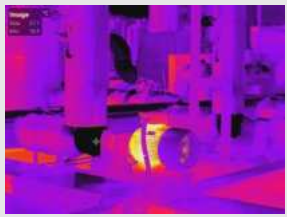


# M Series - Images Quality Comparison (Internal Use Only)

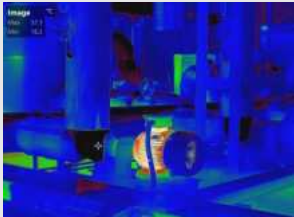


	M11	M11W	M20	M20W	M30	M60
IR	192 × 144 (27,648 pixels)	192 × 144 (27,648 pixels)	256 × 192 (49,152 pixels)	256 × 192 (49,152 pixels)	384 × 288 (110,592 pixels)	640 × 480 (307,200 pixels)
SuperIR	384 × 288 (110,592 pixels)	384 × 288 (110,592 pixels)	512 × 384 (196,608 pixels)	512 × 384 (196,608 pixels)	768 × 576 (442,368 pixels)	1280 × 960 (1,228,800 pixels)
Image Mode	5: Thermal/Visual/Fusion/PIP/Blending					
Palettes	8: White Hot, Black Hot, Rainbow, Ironbow, Red Hot, Fusion, Rain, Blue Red					
Min. Focus Distance	0.1 m(0.33 ft)	0.5 m (1.64 ft)	0.1 m (0.33 ft)	0.5 m (1.64 ft)	0.2 m (0.65 ft)	0.3 m (0.98 ft)

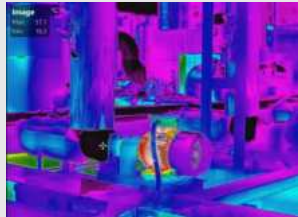
- 8 color palettes



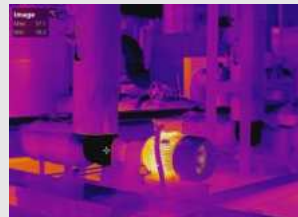
Ironbow



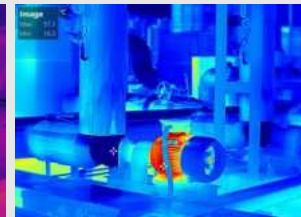
Rainbow



Rain



Fusion



Blue Red



White hot



Black hot



Red Hot



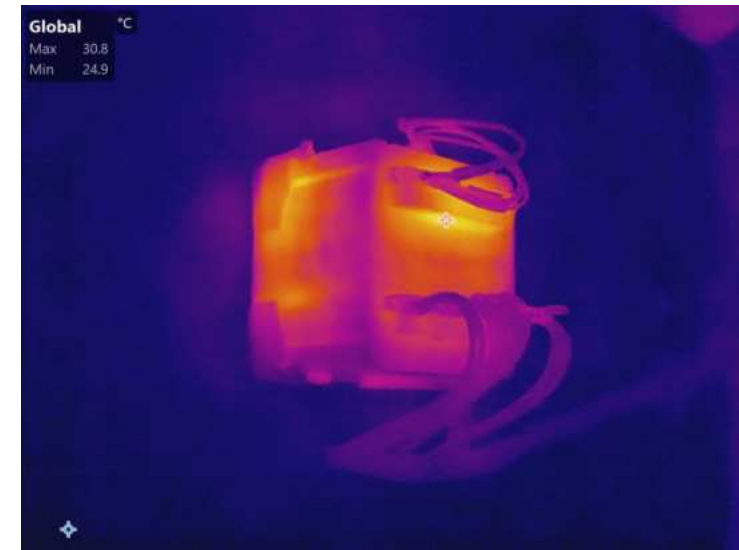
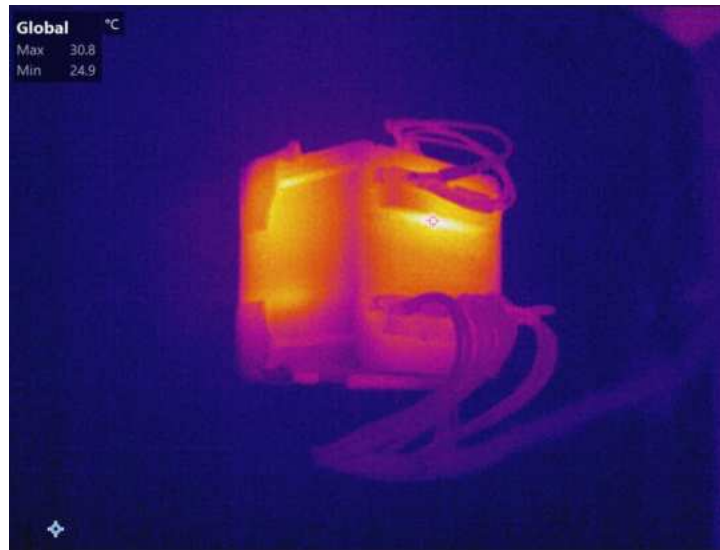
# M Series - Comparison Of Images (Internal Use Only)

SuperIR  OFF

M30 vs M60

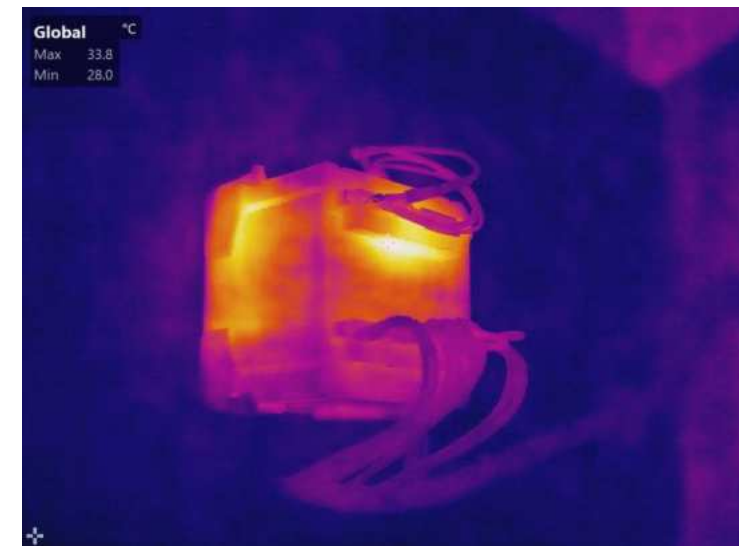
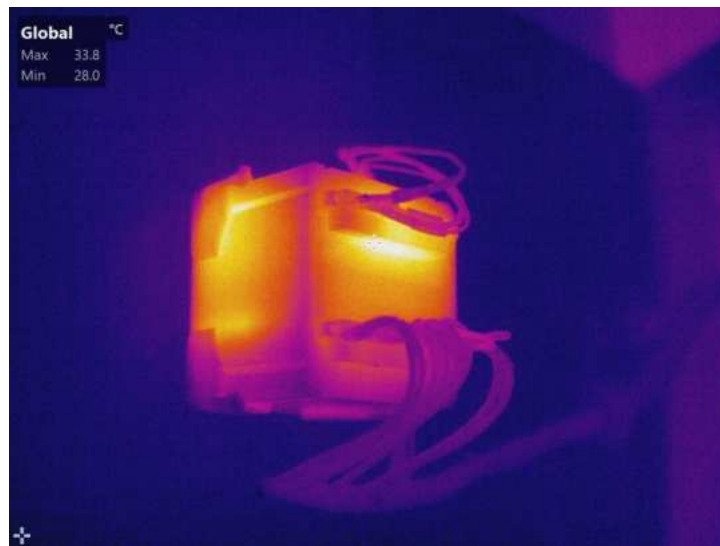
SuperIR  ON

M30



30 cm

M60

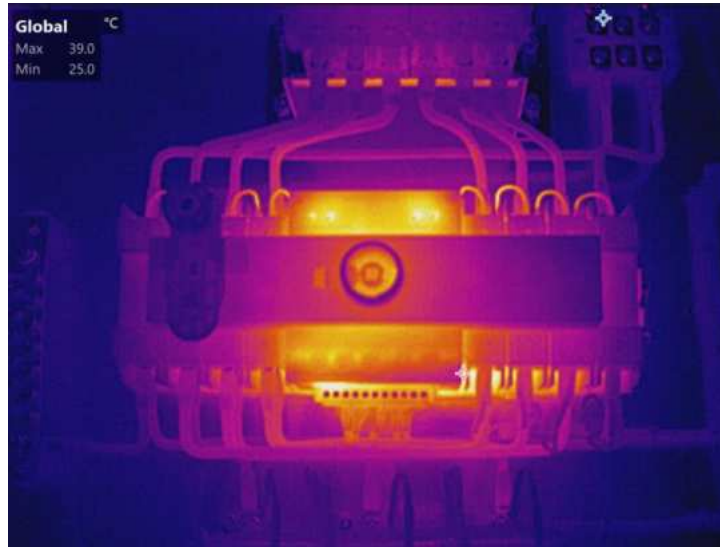


# M Series - Comparison Of Images (Internal Use Only)

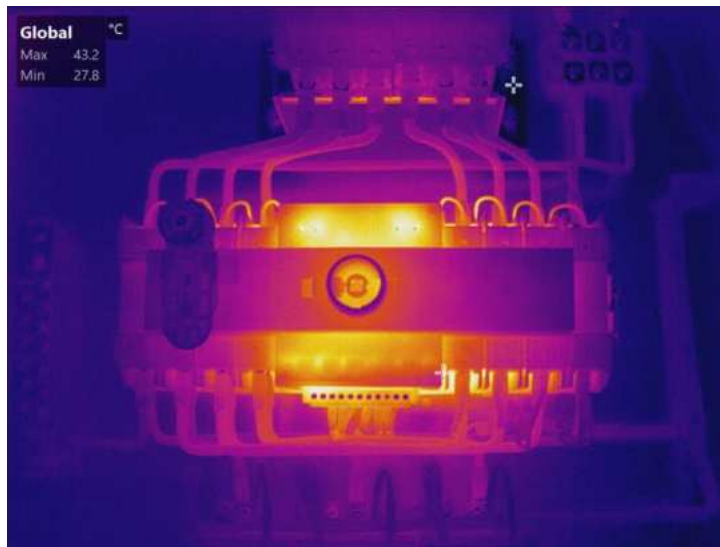
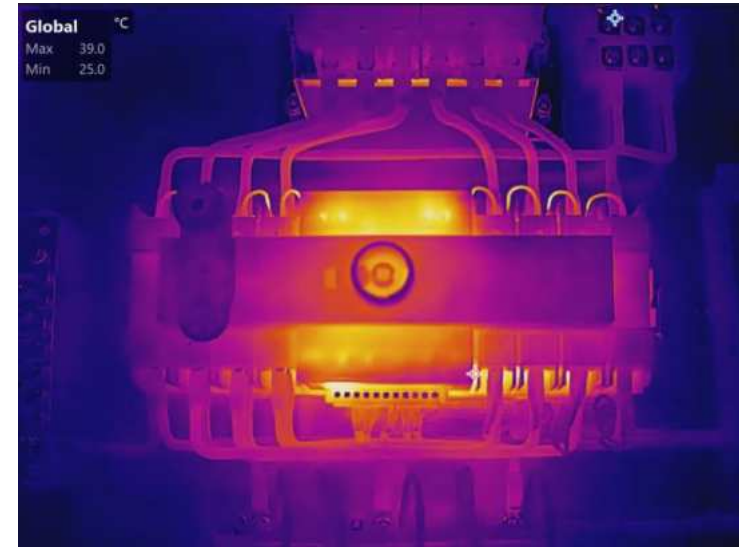
SuperIR  OFF

M30 vs M60

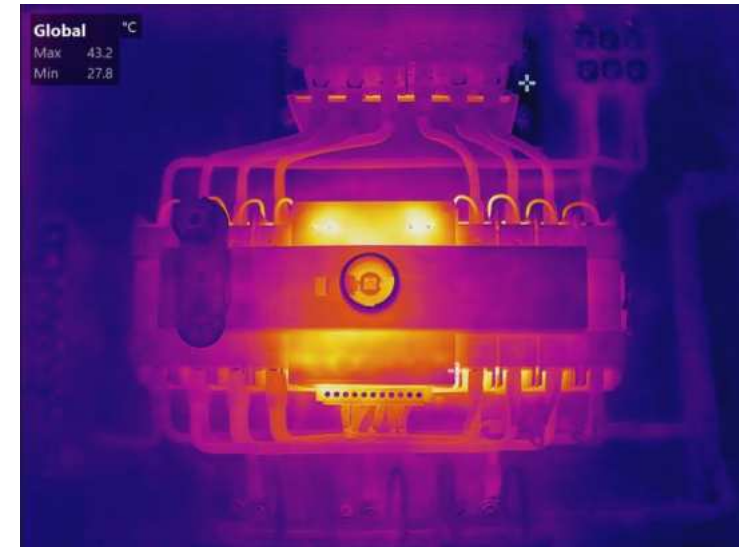
SuperIR  ON



M30



M60

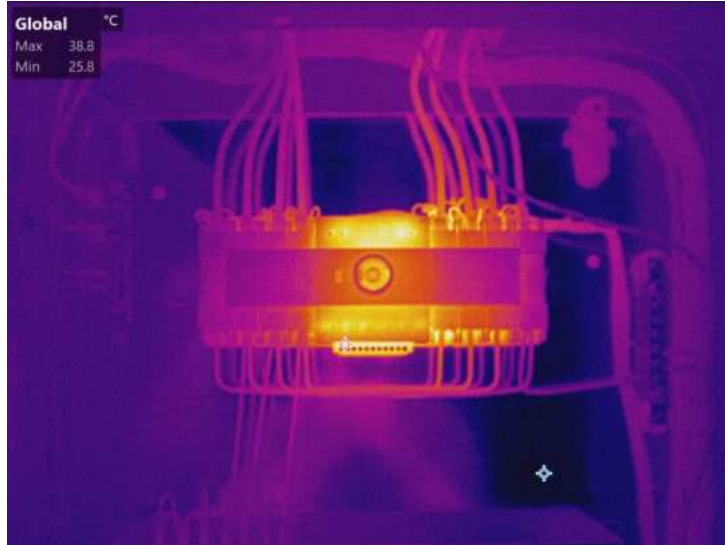


50 cm

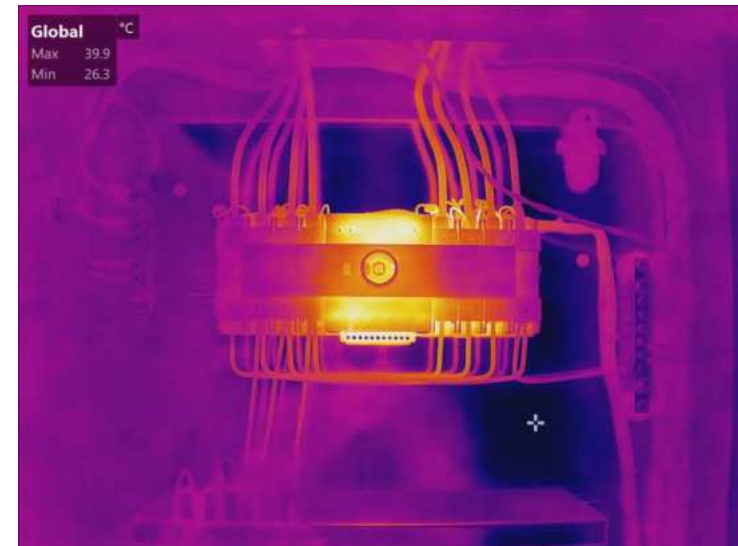
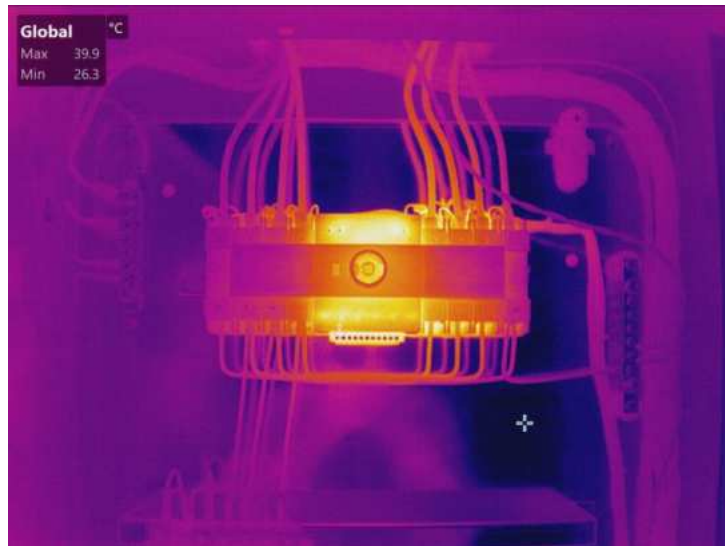
# M Series - Comparison Of Images (Internal Use Only)

SuperIR  OFF M30 vs M60 SuperIR  ON

M30



M60



1 m

# M Series - Comparison Of Images (Internal Use Only)

SuperIR  OFF M30 vs M60 SuperIR  ON



5 m

M30



M60



# M Series - Comparison Of Images Short Distance (Internal Use Only) HIKMICRO

**M11**

**M11W**

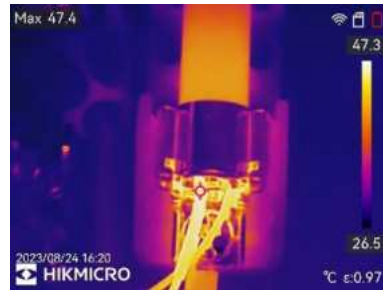
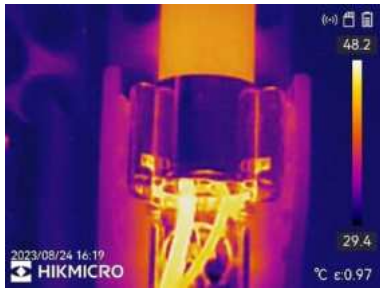
**M20**

**M20W**

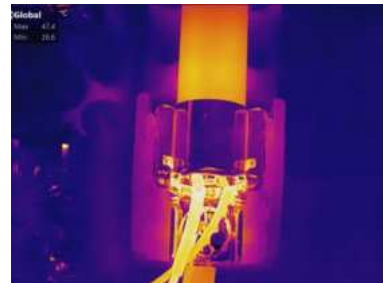
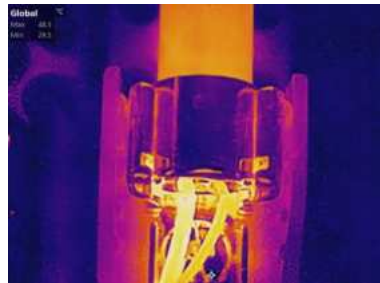
**M30**

**M60**

10 cm



**SuperIR  
On**



Min.

Focus Distance 0.1 m(0.33 ft)

0.5 m (1.64 ft)

0.1 m(0.33 ft)

0.5 m (1.64 ft)

0.2 m (0.65 ft)

0.3 m (0.98 ft)

# M Series - Comparison Of Images Short Distance (Internal Use Only) HIKMICRO

**M11**

**M11W**

**M20**

**M20W**

**M30**

**M60**

30 cm



**SuperIR  
On**



Min.

Focus Distance 0.1 m(0.33 ft)

0.5 m (1.64 ft)

0.1 m(0.33 ft)

0.5 m (1.64 ft)

0.2 m (0.65 ft)

0.3 m (0.98 ft)

# M Series - Comparison Of Images Medium Distance (Internal Use Only) HIKMICRO

M11

M11W

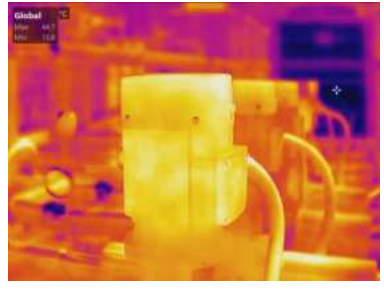
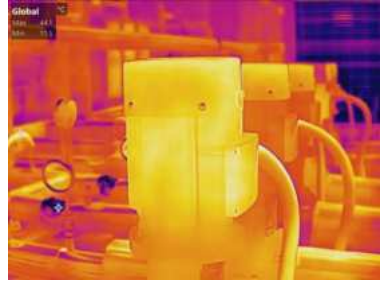
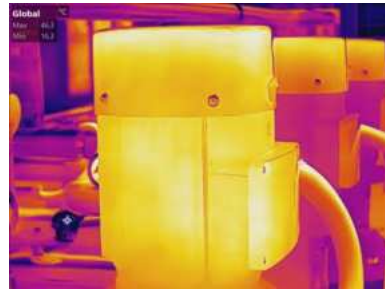
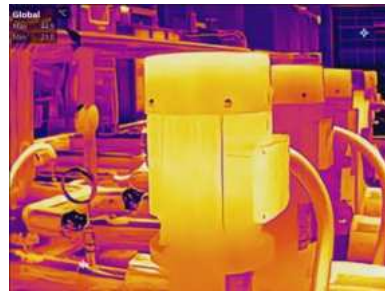
M20

M20W

M30

M60

50 cm



SuperIR  
On

# M Series - Comparison Of Images Medium Distance (Internal Use Only) HIKMICRO

M11

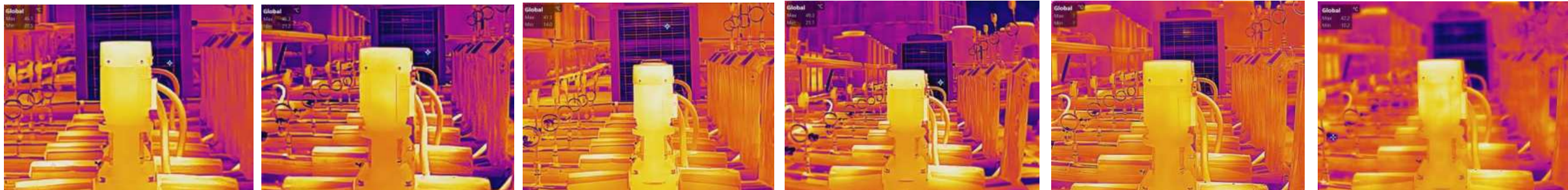
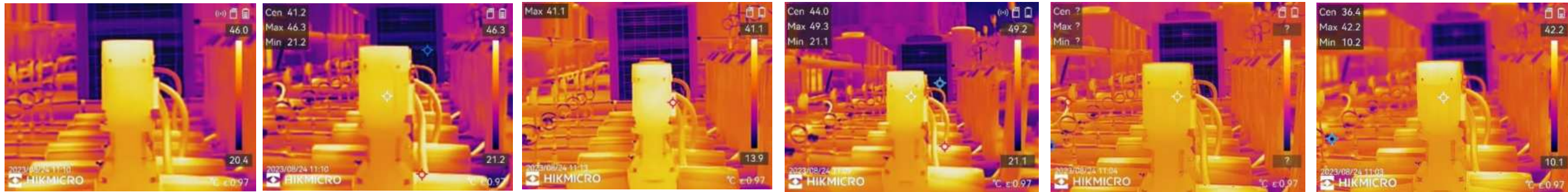
M11W

M20

M20W

M30

M60





# M Series - Comparison Of Images Long Distance (Internal Use Only)



M11

M11W

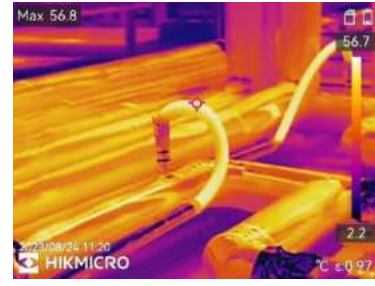
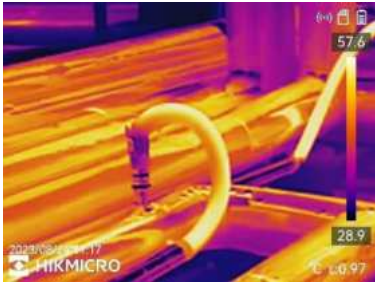
M20

M20W

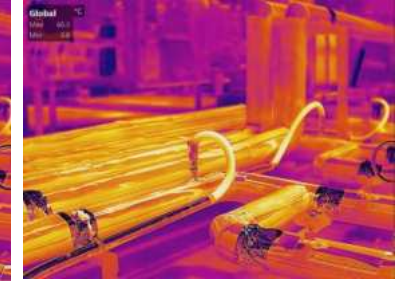
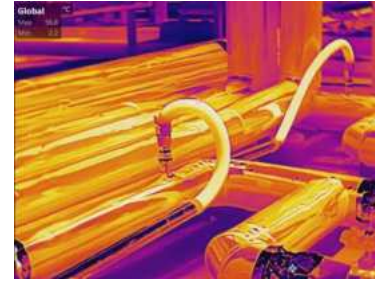
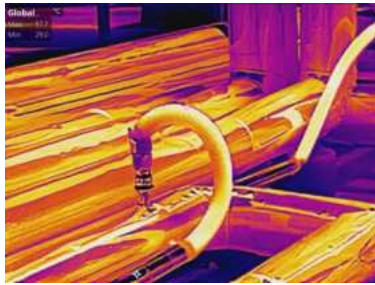
M30

M60

3 m



SuperIR  
On



# M Series - Comparison Of Images Long Distance (Internal Use Only)



M11

M11W

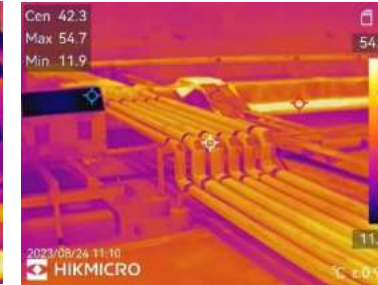
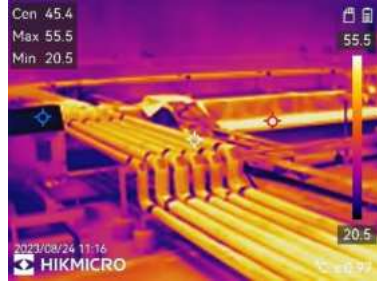
M20

M20W

M30

M60

5 m



SuperIR  
On

# M Series - Comparison Of Images (Internal Use Only)



M11

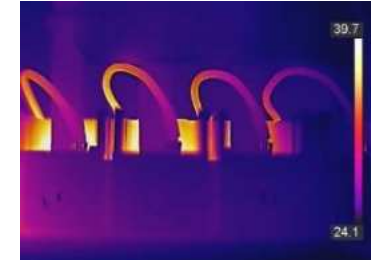
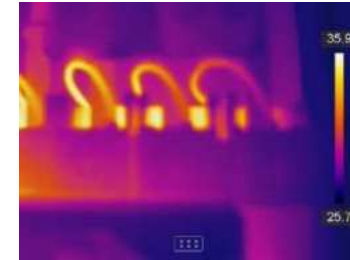
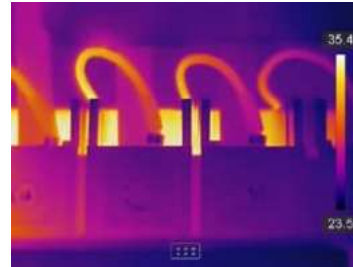
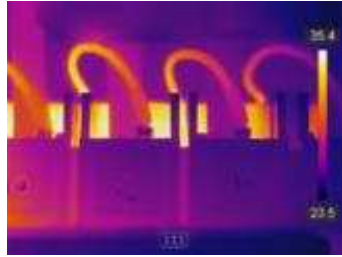
M11W

M20

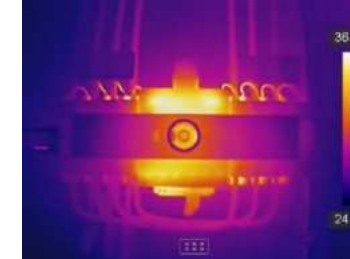
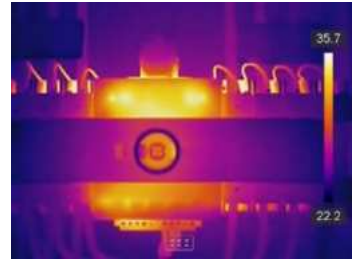
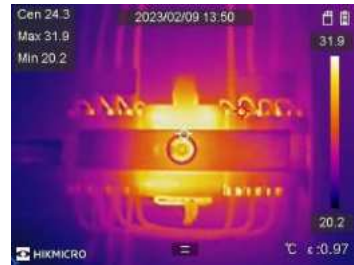
M20W

M30

0.1m



0.5m



1m



\* The M11W/M20W is equipped with a focus-free lens with a minimum focusing distance of 0.5 m (1.64 ft).

# M Series - Comparison Of Images (Internal Use Only)



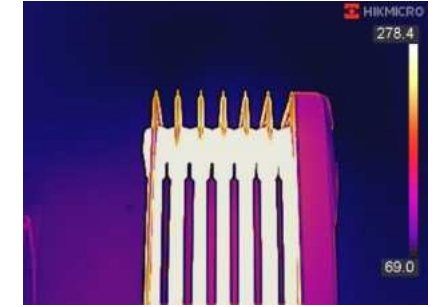
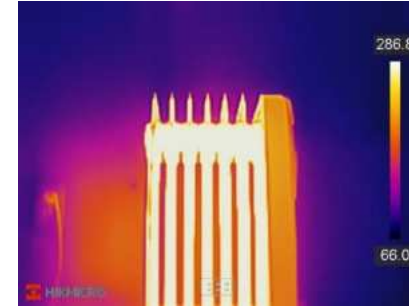
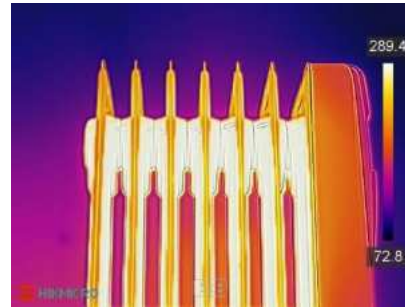
M10

M20

M20W

M30

1.0m



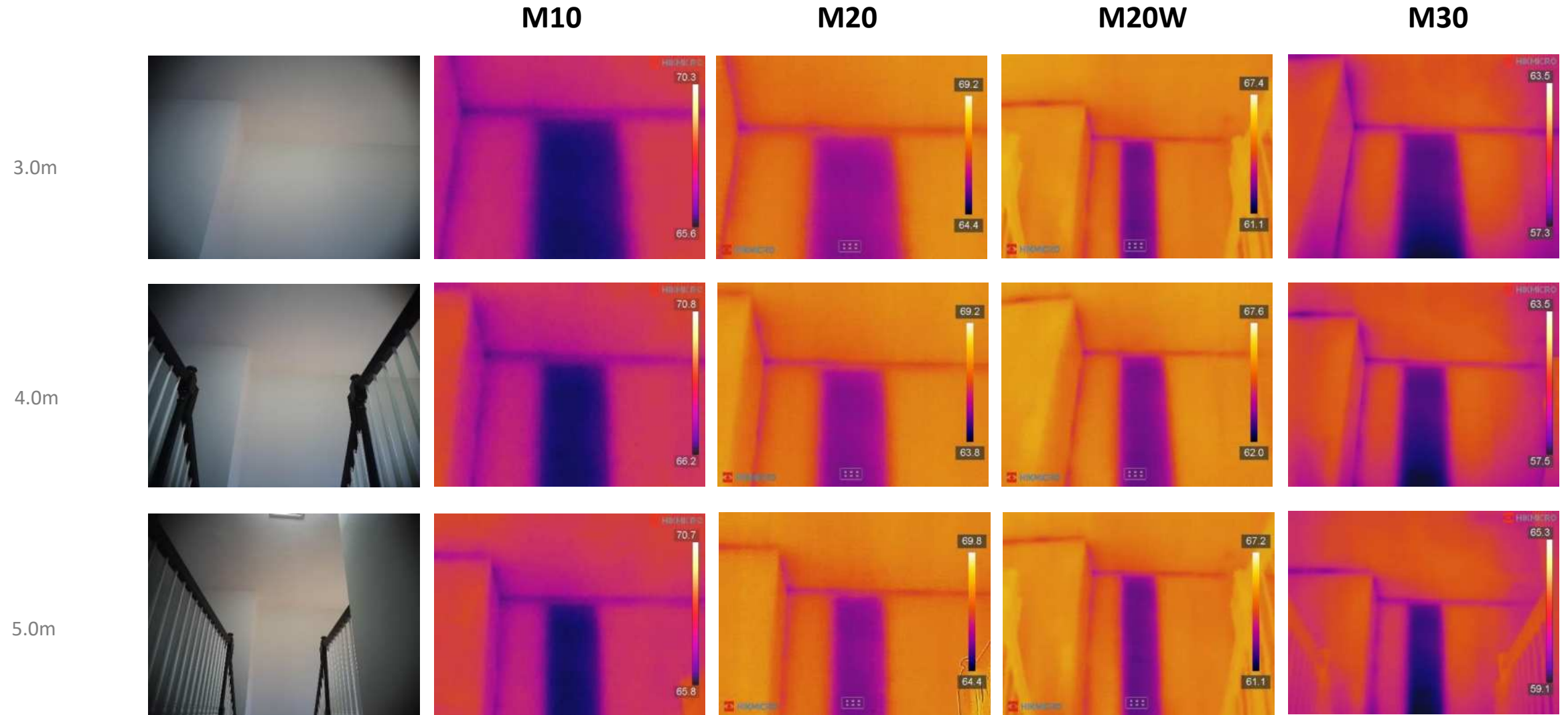
1.0m



2m





# M Series - Comparison Of Images (Internal Use Only)





# THANK YOU

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