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› [HIKMICRO Thermal Imaging Camera PocketC 256 x 192 IR Resolution Thermal Camera with 8MP Visual Camera, 25 Hz, 3.5" Touch Screen Thermal Scanner, IP54, -4°F~752°F, No-WiFi User Manual](#)

HIKMICRO PocketC

HIKMICRO PocketC Thermal Imaging Camera User Manual

Model: PocketC

1. PRODUCT OVERVIEW

The HIKMICRO PocketC is a compact and powerful thermal imaging camera designed for professional and home inspections. It combines a high-resolution infrared sensor with a visual camera to provide detailed thermal and optical images, aiding in the detection of temperature anomalies, moisture issues, and insulation problems.



Figure 1.1: HIKMICRO PocketC Thermal Imaging Camera, showing the front display with thermal image and the rear camera module.

Key Features:

- **Dual Cameras:** 256x192 IR resolution thermal camera and 8MP visual camera for enhanced image quality.
- **Accurate Temperature Reading:** Detects temperature differences as small as 0.04°C with $\pm 2\%$ accuracy.
- **Wide Measurement Range:** -4°F to 752°F (-20°C to 400°C).
- **3.5" Touch Screen:** For easy navigation, image adjustments, and mode switching.
- **Versatile Image Modes:** Thermal, Visual, Fusion, and Picture-in-Picture (PIP).
- **On-camera Recording:** 16GB eMMC flash storage for images and videos.
- **Durable Design:** IP54 rated and 2-meter drop test compliant.

2. SETUP

2.1 Charging the Device

The PocketC camera is equipped with a built-in Li-Ion rechargeable battery. Before first use, fully charge

the device using the provided USB-C cable and power adapter. A full charge provides up to 4 hours of continuous operation.

1. Connect the USB-C cable to the camera's charging port.
2. Connect the other end of the cable to a compatible USB power adapter or a computer's USB port.
3. The charging indicator on the device will show charging status.

2.2 Powering On/Off

1. To power on, press and hold the power button until the screen illuminates.
2. To power off, press and hold the power button until the shutdown prompt appears, then confirm.

3. OPERATING INSTRUCTIONS

3.1 Navigating the Touch Screen

The 3.5-inch LCD touch screen allows for intuitive control. Tap icons to select functions, and swipe to navigate menus or switch between image modes.



Figure 3.1: Interacting with the 3.5-inch LCD touch screen for settings and adjustments.

3.2 Image Modes and Color Palettes

The PocketC offers various image modes and color palettes to optimize visualization for different inspection scenarios.

1. **Switching Modes:** Swipe the screen to cycle through Thermal, Visual, Fusion, and Picture-in-Picture (PIP) modes.
2. **Color Palettes:** Select from 7 color palettes (e.g., White Hot, Black Hot, Rainbow, Ironbow) to highlight temperature differences effectively.



Figure 3.2: Examples of different thermal image modes (Thermal, PIP, Fusion, Optical) and color palettes available on the device.

3.3 Temperature Measurement and Adjustment

The camera provides flexible temperature measurement options.

1. **Automatic Three-point Measurement:** Displays Center, Hot Spot, and Cold Spot temperatures instantly.
2. **Temperature Range Adjustment:** Flexibly adjust the temperature range or set limitations to focus on specific areas.
3. **Emissivity Adjustment:** Adjust emissivity based on the material being tested (e.g., cement, brick, wood) for precise readings. Refer to the emissivity table in the settings.

Accurate Temperature Readings



THERMAL
SENSITIVITY
0.04°C

MEASUREMENT
ACCURACY
±2°C

**ADJUSTABLE
EMMISSIVITY**

Figure 3.3: The camera displaying accurate temperature readings with thermal sensitivity and measurement accuracy details.



Figure 3.4: Example of an emissivity table, crucial for accurate temperature measurements based on material type.

3.4 Capturing Images and Videos

Capture thermal and visual images simultaneously with a single click. The device supports video recording and on-camera playback.

1. Press the capture button to take a photo.
2. Navigate to the gallery to view saved images and videos.

On-camera Recording

Built-in 16GB internal memory provides onboard recording and playback.



**Real-time
Recording**



**Replay and
Analysis**

Figure 3.5: The camera's display showing the gallery with recorded thermal images and videos, indicating real-time recording and playback capabilities.

3.5 Additional Features

- **Digital Zoom:** Zoom in on areas of interest with 1.0-4.0x digital zoom.
- **Worklight:** Built-in worklight to facilitate inspections in dark environments.
- **Audio Alarm & Warning Light:** Alerts you when temperatures are outside the set range.
- **Smart Scene Recognition:** Advanced algorithms to easily spot potential moisture and insulation issues.
- **1-TAP Level & Span:** Instantly improves image contrast and highlights potential problems with a single tap.
- **Innovative Macro Mode:** With an optional clip-on macro lens, the camera can detect details as small as 100 microns, useful for circuit board inspections.

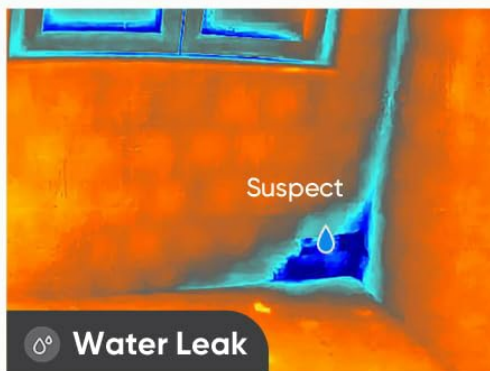


Figure 3.6: The HIKMICRO PocketC camera with its built-in worklight activated, illuminating a dark area for inspection.

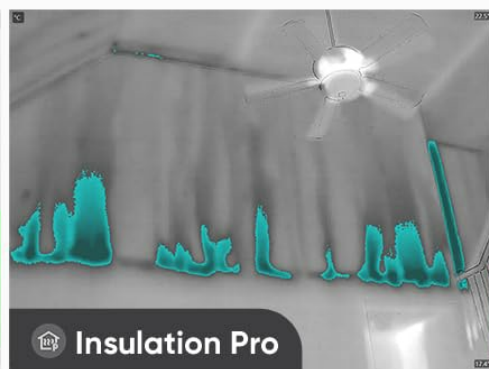
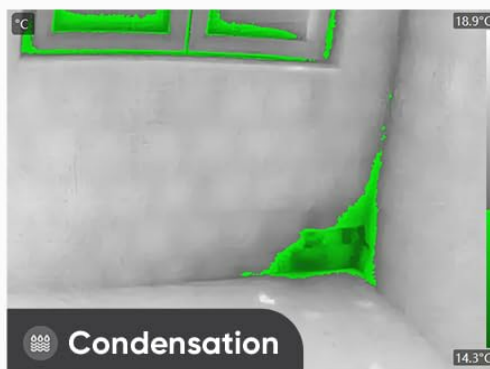
Smart Scene Recognition

FOR BEGINNERS

SuperSCENE™
(Beta)



FOR EXPERTS | Pro Scene Color Alarm



Note: Beta version. Upgrade to the latest firmware to experience the new features

Figure 3.7: Examples of Smart Scene Recognition for beginners (Water Leak, Insulation) and experts (Condensation, Insulation Pro), highlighting potential issues.

1-TAP LEVEL & SPAN

Instantly improve image contrast and
highlight potential problems



Figure 3.8: Demonstration of the 1-TAP Level & Span feature, showing how it instantly improves image contrast and highlights problems in a thermal image of a building.

Innovative Macro Mode

Using a clip-on macro len, Pocket C can see details as small as 100 microns and take temp readings on small objects like components on circuit boards.



Figure 3.9: The HIKMICRO PocketC camera set up with a clip-on macro lens, demonstrating its ability to take temperature readings on small objects like components on circuit boards.

4. MAINTENANCE

4.1 Cleaning the Device

To ensure optimal performance and longevity, keep the camera clean.

- Use a soft, dry cloth to wipe the body of the camera.
- For the lens and screen, use a lens cleaning cloth and specialized cleaning solution if necessary, avoiding abrasive materials.
- Do not immerse the device in water.

4.2 Storage

When not in use, store the camera in a cool, dry place, away from direct sunlight and extreme temperatures. Ensure the battery is partially charged (around 50%) for long-term storage to preserve battery health.

5. TROUBLESHOOTING

This section addresses common issues you might encounter with your HIKMICRO PocketC.

5.1 Device Not Turning On

- Ensure the battery is sufficiently charged. Connect the device to a power source and allow it to charge for at least 30 minutes before attempting to power on again.
- Press and hold the power button firmly for several seconds.

5.2 Inaccurate Temperature Readings

- Verify that the emissivity setting is correctly adjusted for the material being measured. Different materials have different emissivities.
- Ensure there are no obstructions between the camera lens and the target object.
- Check the distance to the object; extreme distances can affect accuracy.

5.3 Connectivity Issues (e.g., Bluetooth)

If you experience difficulty connecting the camera to other devices (e.g., for data transfer), ensure that the connection settings are correctly configured on the camera. Navigate to the 'Connections' menu in the device settings to verify Bluetooth status and pairing options. If issues persist, consult the HIKMICRO support website for detailed connection guides or firmware updates.

6. SPECIFICATIONS

Feature	Detail
Item Model Number	PocketC
Package Dimensions	6.93 x 6.69 x 2.64 inches; 1.41 Pounds
Batteries	1 Lithium Ion batteries required (included)
Manufacturer	HIKMICRO
ASIN	B0CL6JNF2X
Date First Available	October 17, 2023

7. WARRANTY AND SUPPORT

7.1 Warranty Information

HIKMICRO provides the following warranty for the PocketC Thermal Imaging Camera:

- **Battery:** 2 Years
- **Entire Device:** 3 Years
- **Sensor:** 10 Years

Lifetime firmware updates and technical support are also included.

7.2 Technical Support

For technical assistance, troubleshooting beyond this manual, or warranty claims, please contact HIKMICRO customer support. Refer to the official HIKMICRO website for the most current contact information and support resources.