

## HikMicro HM-TP42-3AQF/W-POCKET2 - Pocket Thermal Imaging Camera



### Product Description

HIKMICRO Pocket Series is equipped with a high-resolution HIKMICRO VOx detector, an 8 MP optical camera, and a 3.5" LCD touch screen. It helps you quickly and efficiently locate the hidden problems and accurately measure the temperatures of faults. The wide temperature range of -20°C to 400°C is ideal for building inspection, HVAC, electrical, and mechanical equipment maintenance. The 25 Hz frame rate keeps up with fast inspections, and the Wi-Fi function allows the Pocket to share images in real-time. The Pocket Series is a powerful thermography tool in your pocket, so it is always there whenever you need it.

### Features

- Thermal resolution: 256 x 192 (49, 152 pixels), NETD: < 40 mK (@ 25°C, F# = 1.0)
- Accurately measure temperature from -20°C to 400°C | -4°F to 752°F)
- Accuracy: Max. ( $\pm 2^{\circ}\text{C}/3.6^{\circ}\text{F}$ ,  $\pm 2\%$ )
- 25 Hz image frequency
- Thermal, fusion, PIP, and optical modes, 8 MP optical camera
- Manual, automatic, and 1-Tap level and span
- High temperature alarm
- Built-in 16 GB memory
- LED work light
- 1.0x to 4.0x continuous digital zoom
- Up to 4 hours continuous running

### Specifications

- Thermal Module
  - Detector Type: Vanadium Oxide Uncooled Focal Plane Array
  - IR Resolution: 256 x 192 ( 49,152 pixels)
  - Detector Pitch :12  $\mu\text{m}$
  - Spectral Range: 8 to 14  $\mu\text{m}$
  - NETD: < 0.04°C ( 40 mK ) at 25°C (77°F) ambient temperature, F# = 1.0
  - FOV (Field of View ): 50° H x 37.2° V
  - Image Frequency: 25 Hz
  - Focal Length: 3.5 mm
  - Focus: Fixed
  - Minimum Focus Distance: 0.3 m (0.98 ft)
  - IF0V (Spatial Resolution): 3.43 mrad
  - F-number: F1.1
- Optical Module
  - Built-in Visual Camera: 3264 x 2448 (8 MP)

- Focus: Fixed
- FOV: 64.6° H x 51.5° V
- Picture Resolution: Configurable: 2 MP, 5 MP, 8 MP
- Video Resolution: 640 x 480
- Image Display
  - Display: 640 x 480 Resolution, 3.5" LCD Touch Screen
  - Screen Brightness: Manual adjustment
  - Digital Zoom: 1.0x to 4.0x continuous
  - Color Palettes: 7: White Hot, Black Hot, Rainbow, Ironbow, Red Hot, Fusion, Rain
  - Image Modes: Thermal/Optical/Fusion/PIP
  - PIP: Resizable and movable infrared area on the visual image
  - Fusion: Thermal image with visual camera details
  - Level/Span: Auto/Manual/I-Tap Touch-Screen
  - Minimum Temp Span (Manual): 2°C (3.6°F)
- Measurement and Analysis
  - Object Temperature Range: -20°C to 400°C ( -4°F to 752°F )
  - Accuracy: Max. (± 2°C/3.6°F, ± 2%), for ambient temperature from 15°C to 35°C (59°F to 95°F) and object temperature above 0°C (32°F)
  - Measurement Presets: Center Spot, Hot Spot, Cold Spot, Off
  - High Temperature Alarm: Audible/visual alarm of above temperature threshold, user-defined temperature threshold
  - On-Camera Emissivity Correction: Variable from 0.01 to 1.0 or selected from the materials list
  - On-Camera Reflected Temperature Compensation: Automatic, based on the input of the reflected temperature
  - On-Camera Transmission Correction: Automatic, based on the inputs for distance and humidity
- Data Storage
  - Storage Media: Built-in EMMC (16 GB)
  - Image Storage Capacity: Approx. 60, 000 images
  - Image File Format
    - Radiometric.JPEG with measurement data included
    - Thermal.THMJPEG without measurement data included
  - Text Note: Max. 200 characters
  - Video Storage Capacity: Approx. 10 h
  - Video File Format: Standard MP4 non-radiometric video
- Software
  - PC Software: HIKMICRO Analyzer
  - APP: HIKMICRO Viewer App
  - Cast Screen: UVC Alarm Client
- Battery
  - Power Supply: 5 VDC/ 2 A (Charging via USB), fast charging
  - Power Consumption: 1.92 W
  - Battery Type: Rechargeable Li-ion battery
  - Battery Operating Time: 4 hours continuous running per battery (actual life varies depending on settings and usage)
  - Battery Charging Time: 1.5 h to 94%, 2.5h to full charge
  - Battery Charging System: In-imager charging, fast charging
  - AC Operation: AC operation with included power supply (100 VAC to 240 VAC, 50/ 60 Hz)
- General
  - Wi-Fi: 802.11 b/g/n (2.4 GHz)
  - Bluetooth: Bluetooth 4.2
  - USB Interface: USB 2.0, Type-C
  - LED Light (torch): Yes
  - Microphone: Yes
  - Buzzer: Yes, audible alarm of above temperature threshold
  - Carrying Pouch: Yes
  - Protection Level: IP54 (protected against dust, limited ingress; protection against water spray from all directions]
  - Drop Test Height: 2 m (6.56 ft)
  - Warranty: 3 years for whole product, 10 years for detector, and 2 years for battery
  - Recommended Calibration Cycle: 1year (assumes normal operation and normal aging]
  - Safety: IEC 61010-1: Overvoltage Category II, Pollution Degree 2
  - Electromagnetic Compatibility
    - EN55032: 2015 + All: 2020
    - EN50130-4: 2011 + All: 2014
    - EN61000-3-3: 2013
  - Australian RCM
    - EN 61010-1: 2010
    - EN55032: 2015 + All: 2020
    - EN50130-4: 2011 + All: 2014
    - EN61000-3-3: 2013
  - US FCC: CFR 47, Part 15 Subpart B
  - RoHS Compliant: Yes
  - Vibration: 0.03 g<sup>2</sup>/Hz (3.8 g), 2.5 g IEC 60068-2-6
  - Shock: 25 g, IEC 68-2-29

- Working Temperature Range: -10°C to 50°C ( 14°F to 122°F)
- Storage Temperature Range: -20°C to 60°C ( -4°F to 140°F)
- Relative Humidity: < 95 % non-condensing
- Weight: Approx. 218 g (0.481 lb)
- Dimension: 138.5 mm x 85.2 mm x 23.6 mm
- Tripod Mounting: UNC 1/4"-20

**Includes**

- (1) Camera
- (1) Quick Start Guide
- (1) Power Supply
- (1) USB Cable
- (1) Carrying Pouch
- (1) Wrist Strap