

## B20 Handheld Thermography Camera



HIKMICRO B20 is designed for temperature measurement to find invisible faults. It's equipped with a 256 x 192 resolution HIKMICRO thermal detector and 2MP optical detector. The thermography ranges from -20°C to 550°C (-4°F to 1022°F) . Which meets most situation. It helps the staff to quickly find the fault according to accurate temperature measurement of high temperature targets in the environment. Meanwhile it provides assistant decision and ensure safety. The device is mainly applied to various industries, such as Building, HVAC, and auto industry, etc.

### Key Features

- Thermal resolution: 256 x 192 (49 152 pixels)
- NETD : < 40 mK (@ 25 °C,F#=1.0)
- Temperature measurement range : -20°C to 550°C (-4°F to 1022°F)
- Accuracy: Max ( $\pm 2^{\circ}\text{C}/3.6^{\circ}\text{F}$ ,  $\pm 2\%$ ), for ambient temperature 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, User Preset Point
- 25 Hz image frequency
- 3.2" LCD screen display
- Up to 6 hours continuous running

## Specification

| Thermal Module            |                                                                                                                                                              |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor              | Vanadium Oxide Uncooled Focal Plane Arrays                                                                                                                   |
| IR Resolution             | 256 x 192 (49 152 pixels)                                                                                                                                    |
| Pixel Pitch               | 12 $\mu$ m                                                                                                                                                   |
| Spectral Range            | 8 - 14 $\mu$ m                                                                                                                                               |
| NETD                      | < 40 mK (@25°C), F#=1.0                                                                                                                                      |
| Focal Length              | 3.6mm                                                                                                                                                        |
| FOV (Field of View)       | 37.2° × 50.0°                                                                                                                                                |
| Image Frequency           | 25 Hz                                                                                                                                                        |
| Focus                     | Fixed                                                                                                                                                        |
| IFOV (Spatial Resolution) | 3.3mrad                                                                                                                                                      |
| Aperture                  | F1.0                                                                                                                                                         |
| Minimum Focus Distance    | 0.3 m (0.98 ft)                                                                                                                                              |
| Optical Module            |                                                                                                                                                              |
| Picture Resolution        | 1600 × 1200 (2 MP)                                                                                                                                           |
| FOV                       | 55° × 42°                                                                                                                                                    |
| Focal Length              | 2mm                                                                                                                                                          |
| Image Display             |                                                                                                                                                              |
| Display                   | 240 × 320 Resolution, 3.2" LCD Screen                                                                                                                        |
| Color Palettes            | White Hot, Black Hot, Rainbow, Ironbow                                                                                                                       |
| Image Modes               | Thermal/Optical/Fusion/PIP                                                                                                                                   |
| PIP                       | Thermal Picture in Optical Picture                                                                                                                           |
| Fusion                    | Thermal Picture and Optical Picture Combined                                                                                                                 |
| Measurement and Analysis  |                                                                                                                                                              |
| Object Temperature Range  | -20 °C to 550 °C (-4 °F to 1022 °F)                                                                                                                          |
| Accuracy                  | Max ( $\pm 2^{\circ}\text{C}/3.6^{\circ}\text{F}$ , $\pm 2\%$ ), for ambient temperature 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, Point Presets, Off                                                                                                         |
| High Temperature Alarm    | Audible and Visual Warning                                                                                                                                   |
| Storage                   |                                                                                                                                                              |
| Storage Media             | EMMC (16 GB)                                                                                                                                                 |
| Image Storage Capacity    | 90 000 Images                                                                                                                                                |
| Image File Format         | BMP with Measurement Data Included                                                                                                                           |
| Functions                 |                                                                                                                                                              |
| LED Light                 | Yes                                                                                                                                                          |
| Wi-Fi                     | 802.11 b/g/n (2.4GHz)                                                                                                                                        |
| UVC Cast Screen           | Yes                                                                                                                                                          |
| Level/Span                | Auto/Manual                                                                                                                                                  |

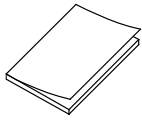
**Power System**

|                        |                             |
|------------------------|-----------------------------|
| Power Supply           | 3.7V DC/ 0.5A               |
| Power Consumption      | 1.8 W                       |
| Battery Type           | Rechargeable Li-ion Battery |
| Battery Operating Time | 6 Hours Continuous Running  |
| Battery Charging Time  | 3 Hours                     |

**General**

|                           |                                                                                                                                                                                                                         |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Menu Language             | 21 Languages<br>English, German, French, Russian, Korean, Spanish, Portuguese, Italian, Japanese, Hungarian, Czech, Slovak, Polish, Romanian, Danish, Turkish, Traditional Chinese, Swedish, Norwegian , Finnish, Dutch |
| 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)                                                                                                                                                                                       |
| Protection Level          | IP54                                                                                                                                                                                                                    |
| Drop Test Height          | 2 m (6.56 ft)                                                                                                                                                                                                           |
| Interface                 | USB Type-C                                                                                                                                                                                                              |
| Weight                    | Approx. 360 g (0.79 lb)                                                                                                                                                                                                 |
| Dimension                 | 221.7 mm × 73.5 mm × 80.5 mm (8.73 " × 2.89 " × 3.17 ")                                                                                                                                                                 |
| Tripod Mounting           | UNC ¼"-20                                                                                                                                                                                                               |

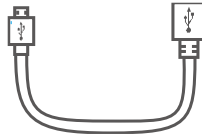
## Package Contents



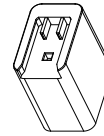
Quick Start Guide  
(x1)



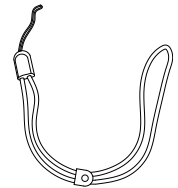
Adapters (x5)



USB Cable (x1)



Power Adapter (x1)



Wrist Strap (x1)

## Order Model

HM-TP52-3AQF/W-B20

## Dimension

