

Fever Screening Scheme By Handheld Thermal Camera

General Parameters

- **Temperature Measurement Range**
30.0-45.0 Degrees Celsius
- **Temperature Measurement Accuracy**
± 0.5 Degrees Celsius
- **Camera Resolution**
Thermal: 160 × 120
- **Operating Environment**
Indoor environment with calm air condition; 10-35 Degrees Celsius

Installation

Installation Cautions

The performance of this fever-screening scheme is greatly affected by environment. This scheme would apply only to those indoor environments, or the scenarios with calm air and consistent temperature. Besides, the relative installation location of devices also greatly affect the accuracy of temperature measurement. In order to improve measurement accuracy, the installation environment has to meet certain requirements:

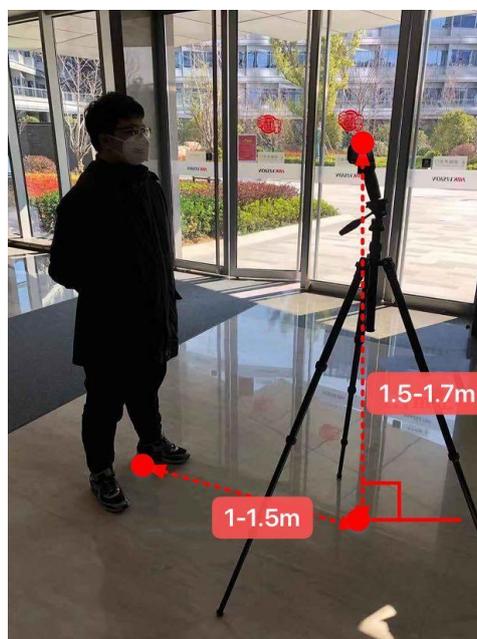
1. Select installation environments with one-direction path to ensure that cameras capture the full faces of all passing persons. It is recommended for people's short stay during measurements.
2. Select indoor environments with calm air and consistent temperature condition. Outdoor environments with rapid temperature changes are not recommended.
3. If this scheme is used in entrance scenes that connect indoors and outdoors environments, It is suggested that the installation location should be kept at a certain distance from the entrance (such as customs or security checkpoints). Persons coming in from outdoors should stay indoors for more than 5 min before the measurement. By these ways, the influence of outdoors temperature environment on measured body surface temperature could be reduced.
4. Avoid objects with high or low temperature placed in the scene.
5. The devices should be installed firmly, thereby avoiding face detection and temperature measurement errors caused by shaking.

Camera Installation

- The camera should be set in front of the one-direction path, capturing the full faces of passing persons, as shown below.

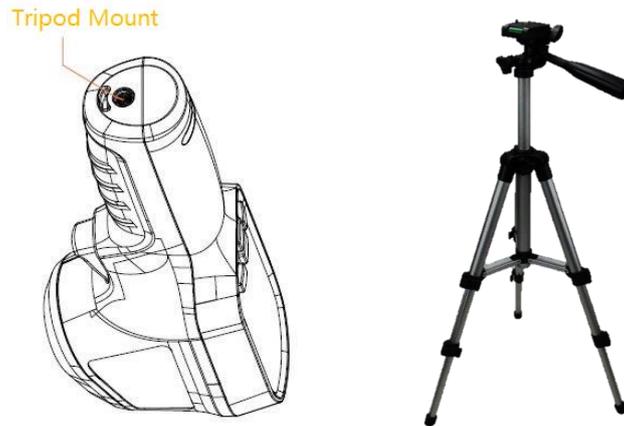


- The installation height is recommended to be set as 1.5-1.7m, namely the camera should be set with the same height of human faces, or even be set with a low elevation angel, thereby reducing error caused by other heat sources near the ground.
- The distance between the camera and measured objects is recommend to be set as 1-1.5m normally.



- Avoid any other object whose temperature is higher than human body's in the background of camera view.
- This handheld thermal camera could be mounted on tripod without extra adapters. There is tripod offered by HIKVISION for fixed placement, but it requires

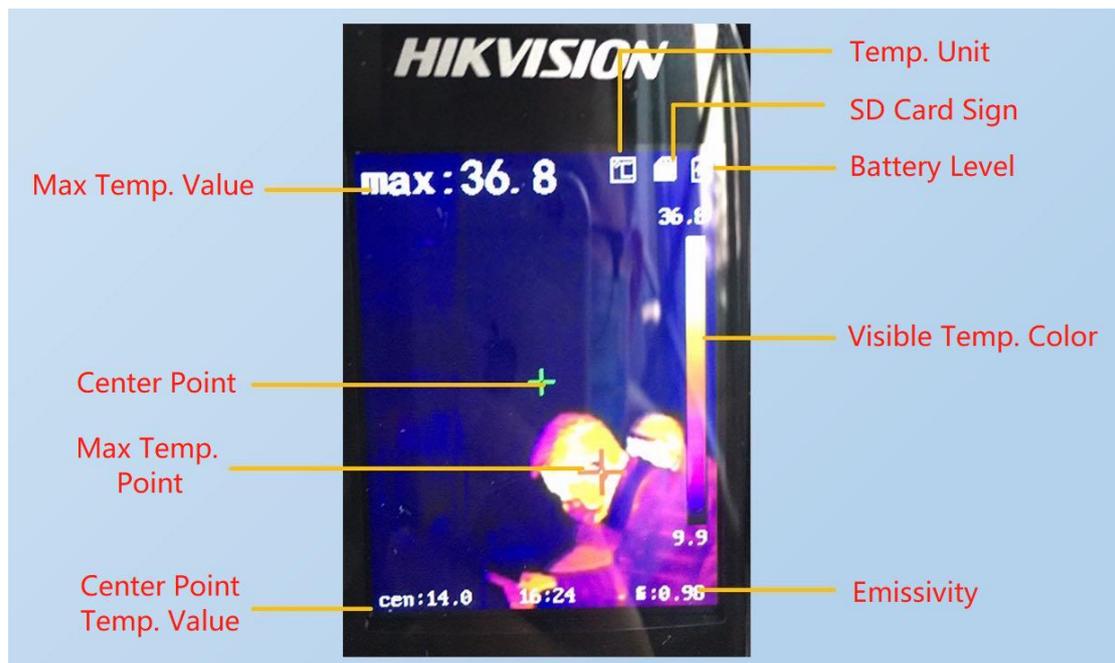
additional purchase. As domestic suppliers have not fully restored production capacity recently, there are multiple suppliers, and there may be slight differences under the same model, which will not affect the use. If you are concerned about this, we recommend that except the tripod adapters should be purchased with products together, the tripods that meet the standards could be purchased locally.



Configuration

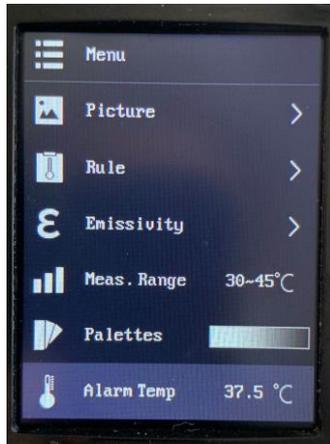
User Interface

The **User Interface** of this handheld thermal camera is as shown below.



Configuration Notes

1. It is suggested to set **Alarm Temp.** as 37.5 degrees Celsius, or it could be adjusted to meet other requirements. When the measured value exceed the set value, the displayed **Max Temp. Value** would turn red and flash as shown below.



Normal Temp. Value: no Alarms



Abnormal Value: triggers Alarm

2. Set **Emissivity** as 0.98 for human skin thermography as shown below.



3. Set **Distance** with the actual distance between the camera and measured object. This actual distance is recommend to be set as 1-1.5m normally as shown below.



Other Notes for Use

- Before this handheld device is used in actual body temperature measurement, it should run for 5 minutes for preheating.
- The measured human body temperature is same as the measured **Max Temp. Value** in this scheme; make sure that the **Max Temp. Point** is on the human face in the camera view during measurement.
- This product is used for preliminary screening of people with fever. After alarm happens, specialized medical thermometer should be used in further check.
- All of the above description about **Installation** and **Configuration** is based on that the device is used with fixed placement. Other uses as portable handheld device or outdoor measurement are not recommended normally. Under these circumstances, the accuracy of temperature measurement may not meet the same standard.