

Thermal Imaging Helmet



Created with ten years of ingenuity, preferred for scientific and technological epidemic prevention

- Aviation-grade advanced metamaterials
- High-accuracy temperature screening
- Flexible non-interfering inspection
- Absolute black-technology comfortable experience

1. Product Functions

- **Non-inductive Temperature Measurement Helmet:** Rapid detection indoor and outdoor



- **Powerful Helmet for Work Resumption:** Automatic recording of the user and his/her body temperature in real time



- **Powerful Helmet for car checking:** Quickly check vehicles and fevered people



2. Product Features

Items

- **Main Helmet:** Advance stab-proof material with energy-absorbing design and ultimate weight reduction

- **Goggles:** Non-polar light sensation discoloration. Adaptive light sensation, working around the clock.

Features

180g
Helmet weight



Intact helmet body for
1m high impact

1135g



Anti-droplet



Anti-infection



Anti-impact



Anti-scratch



Anti-fingerprints



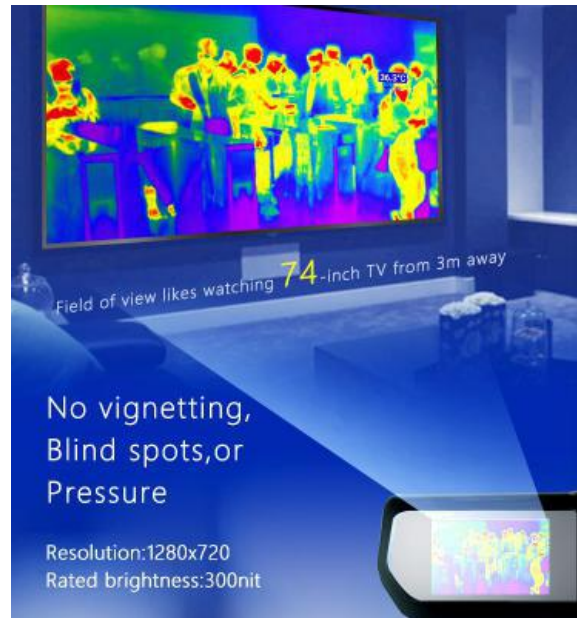
Anti-mist

Pilot helmet goggles technology, and no fracture or breaking after high-speed impact by 6mm steel balls

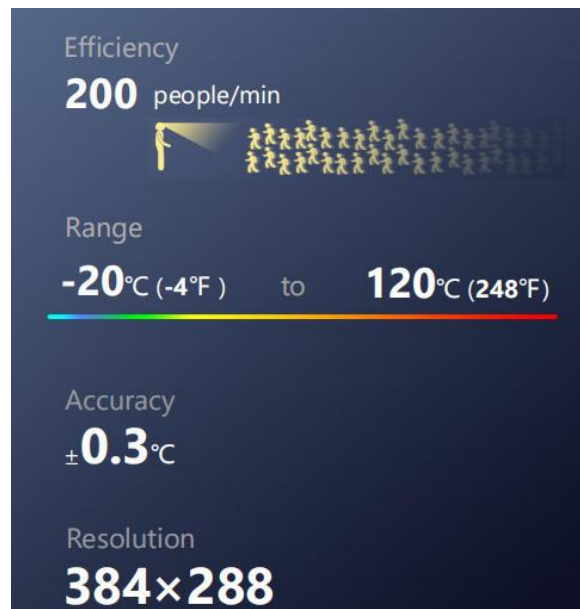
200m/s



- **AR Screen:** High standard array optical waveguide AR technology, 24/7 new visual experience. No vignetting, blind spots, or pressure.



- **Infrared Thermal Imaging:** High-accuracy quick unaware and contactless temperature measurement.



■ Smart Watch

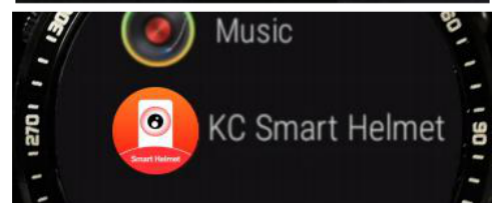
Perfect Matching with Smart
Helmet.

Sporty and Stylish.

Configuration and Control of Smart
Helmet without Mobile Phone.

Professional Configuration and
Control.

Free hands completely.



■ **Communication:** Metamaterial technology, high gain, low power consumption, ultra-low radiation.

Electromagnetic shielding SAR < 0.05_{w/kg}

Radiation is only 1/20 of the national standard of mobile phone radiation

Conformal antenna 8-in-1



■ **Gravity Center Design:** Stable and comfortable wearing. Draw from the aircraft design in gravity center balance. Cloud atlas of gravity center < 5m.

the range of the gravity center
c.g.diagram < 5mm (0.197 inch)




■ **Infrared Thermal Imaging:**
High-accuracy infrared thermal imaging, non-inductive temperature measurement for long-distance crowds.
Temperature measurement efficiency is 200 persons /min.

Temperature measurement range
-20°C to 120°C

Temperature measurement accuracy
±0.3°C

The longest warning distance
7m

Resolution
384x288



■ **AI Capacities:** Supporting offline face recognition and License plate recognition. Supporting QR code identification, accessing to business data system.



■ **Battery Capacity:** 5000mAh large electric quantity.



Modified Lycra fabric

High ability to mold to the head
Super stretch and shape retention for extra flexibility
All-day comfort and lasting fit



Advanced nylon laces with high strength



High-grade soft and durable **lamb suede**



Safety magnetic suction buckle can be opened quickly and effortlessly with just **one hand**

■ **Ergonomics:**

3. Product Specifications

Basic information

Processor	ARM Cortex A53 octa-core 2.5GHz
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Operating system	Android 8.1
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RAM	DDR 4GB
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Memory	eMMC 64GB
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Weight	1135g
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AR display module

Display	Array type optical waveguide display
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Resolution	1280x720
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Field of view	35°
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Virtual screen size	Equivalent to watching 74-inch TV from 3m away
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Rated brightness	300nit
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Infrared thermal imaging module

Resolution	384x288
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Response band	8 μ m~14 μ m
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Image frequency-frame	25Hz
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Temperature measurement range	-20°C~120°C
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Temperature measurement accuracy	+0.3°C within the specified range(2m by default)
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Visible light camera module

Maximum pixels 13 megapixels

Maximum aperture F2.0

Field of view 78°

Video resolution 1080P@30fps

Data communication module

Internet Supporting 4G TD-LTE, 4G LTE FDD, 3G WCDMA, 2G GSM

Wi-Fi IEEE 802.11 b/g/n , 2.4GHz

GPS Supporting GPS / AGPS / GLONASS/ BeiDou

Bluetooth BT 4.2, backward compatible with 3.0, 2.1, supporting BLE

Battery module

Capacity 5000mAh

Voltage DC3.7~4.2V

Charging voltage DC5.0V ±5%

Quick charge Supporting 2A fast charging

Protective performance

Absorbing collision energy RF electromagnetic field radiated susceptibility

Penetration resistance Complying with the requirements of penetration resistance test in GA 296-2001

Electromagnetic shielding SAR value < 0.05W/kg

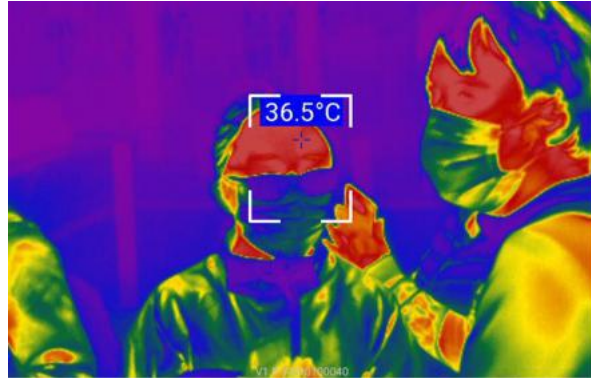
ESD anti-interference Complying with the requirements of ESD anti-interference in GB/T 17626.2-2006

RF electromagnetic field radiated susceptibility Complying with the requirements of ESD anti-interference in GB/T 17626.2-2006

4. Product Application Modes

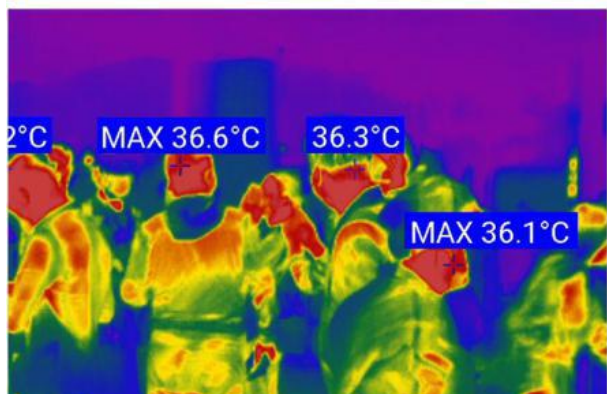
4.1 Single-person temperature measurement mode

Quick temperature measurement for a single person. The maximum temperature of different parts of the body is displayed on the AR module. The temperature above the normal range will trigger an audible and visual alarm.



4.2 Large-crowd temperature measurement mode

Quick temperature measurement for multiple people. The temperature of the forehead, collar, arm, and the other body parts exposed in the screen will be measured. The alarm will trigger when any part of the temperature goes above the normal range.



4.3 QR Code Recognition Mode

Scan the QR code that carries personal information and record personal information into the database automatically in real time realizing personnel identification and paperless registration.



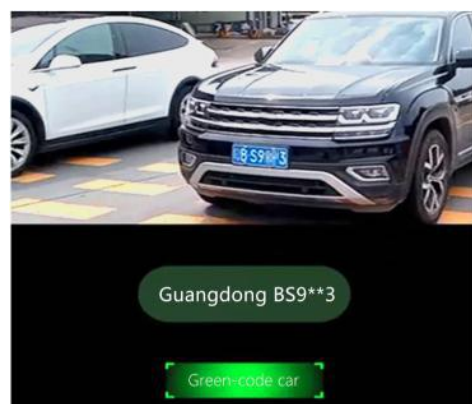
4.4 QR Code Recognition & Temperature Measurement Mode

Scan the QR code that carries personal information and complete the personal temperature measurement at the same time, and record personal information and corresponding temperature in the database automatically in real time, realizing personnel identification and paperless registration.



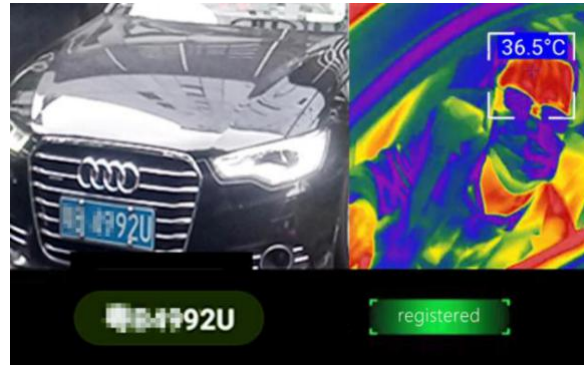
4.5 License Plate Recognition Mode

Recognize vehicle license plate, identify and alert unregistered vehicles or suspect recorded in database. Give an early warning for any risk.



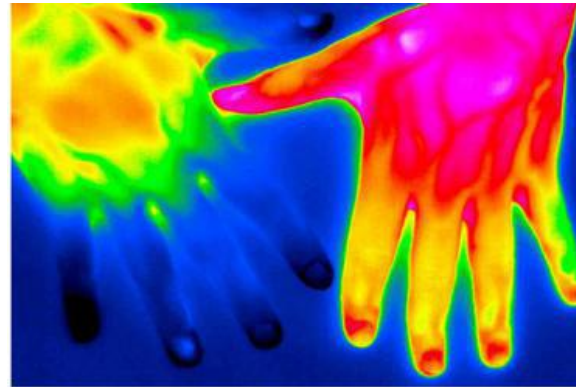
4.6 License Plate Recognition & Temperature Measurement Mode

Recognize vehicle license plate, measure temperature of people in the car, give an early warning for any risk.



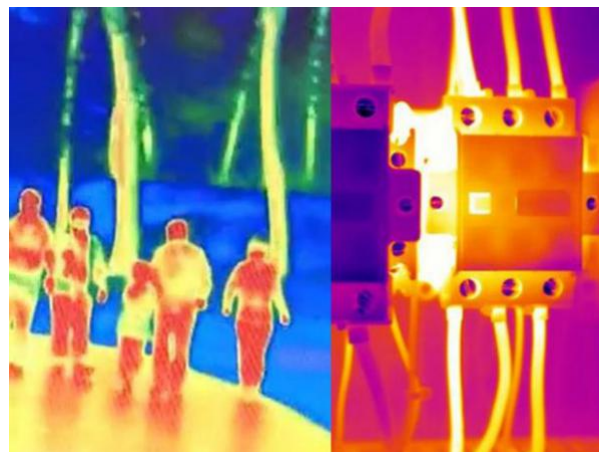
4.7 Human Detection Mode

Perform thermal imaging detection on specific parts of the human body for qualitative analysis of location and size of human lesions.



4.8 Facility Inspection Mode

Perform thermal imaging inspection for industrial facilities such as HVAC equipment, pipelines and electronic equipment



to assist finding target with abnormal temperature or searching for unauthorized person. It can be used for fire control, night vision inspection scenarios such as finding objects, viewing people and fire prevention.

4.9 Face recognition mode

The face of target in the screen is recognized and the personal information will be displayed on the AR display. This mode is applicable for enterprises and institutions to manage their black and white lists of employees and visitors.



5 Product Application Scenario

5.1 Hospital

Early detection of the fever patients with the quick unaware and contactless temperature measurement and paperless registration to avoid the viral cross-transmission between health-care professional and potential fever patients.



5.2 Office Buildings

Quick unaware and contactless temperature measurement and paperless registration to distinguish potential patients from other employees in a very short of time.



5.3 Check Points

With the build-in unaware and contactless thermometer, checkpoints for screening patients can be speed up dramatically.



5.4 Central Business District

Quick unaware and contactless temperature measurement and paperless registration to distinguish potential patients from other customers in a very short of time.



5.5 Traffic Police Bayonet

Non-contact traffic detection, making you feel at ease when driving home.



5.6 Pedestrian Zone in Trading Area

Line-up free for measuring temperature.



5.7 Scenic Spots and Parks

Safe and orderly reopening

