Smart Helmet

Created with Decades of Ingenuity
First Choice for Epidemic Prevention

Advanced Materials and Technologies
High-precision Temperature Measurement
Unaware and Contactless Screening of Fever
Hi-tech Ultimate Experience

Five Powerful Functions

Smart Helmet for Unaware and Contactless Temperature Measurement

Rapid screening for
both indoor and outdoor

Efficient Helmet for Temperature Recording

Record personal info with their daily body temperature automatically

Powerful Helmet for Vehicle Screening

Rapid screening for vehicles
and passengers

Powerful Helmet for Verification

Rapid face recognition and identity verification

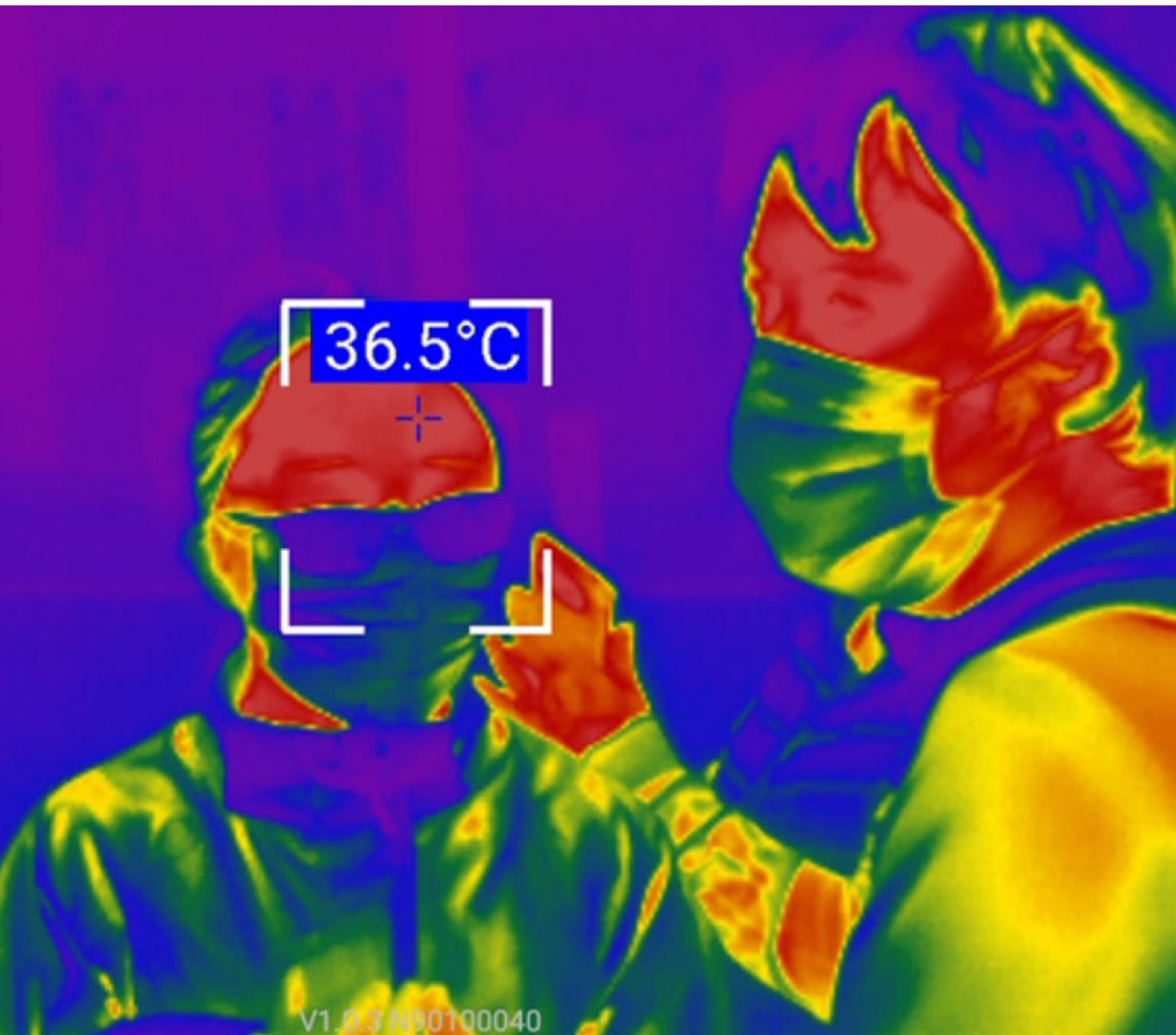
Smart Helmet with Thermal Imaging

Make the invisible visible

Nine Modes

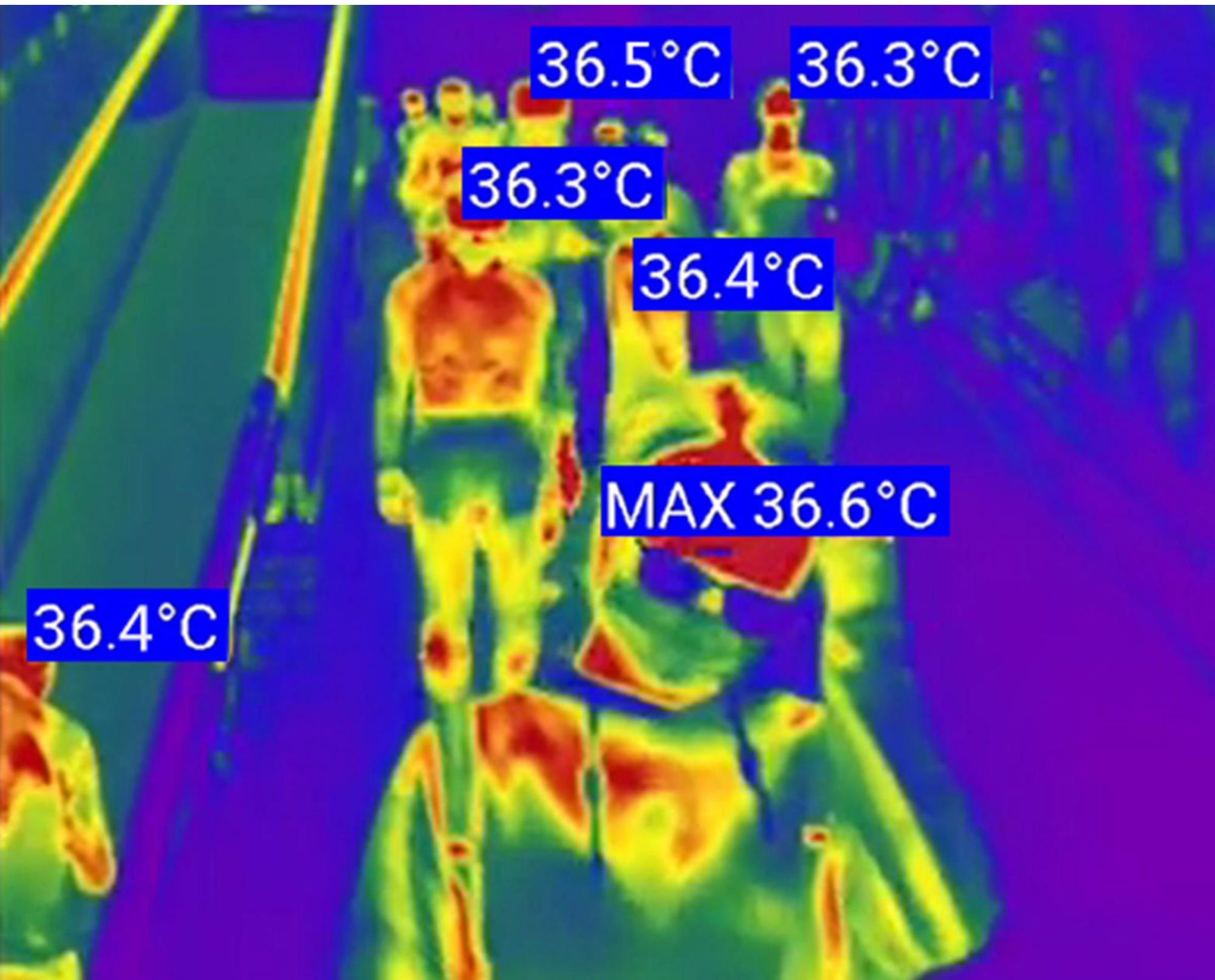
Single-person temperature measurement mode

The temperature of the single target in the center of the screen will be measured. 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.



Large-crowd temperature measurement mode

The temperature of the forehead, collar, arm, and other body parts exposed in the screen will be measured. The system will display the temperature if any part in the screen falls into the preset temperature range. The alarm will trigger when any part of the temperature goes above the threshold value.



QR code mode

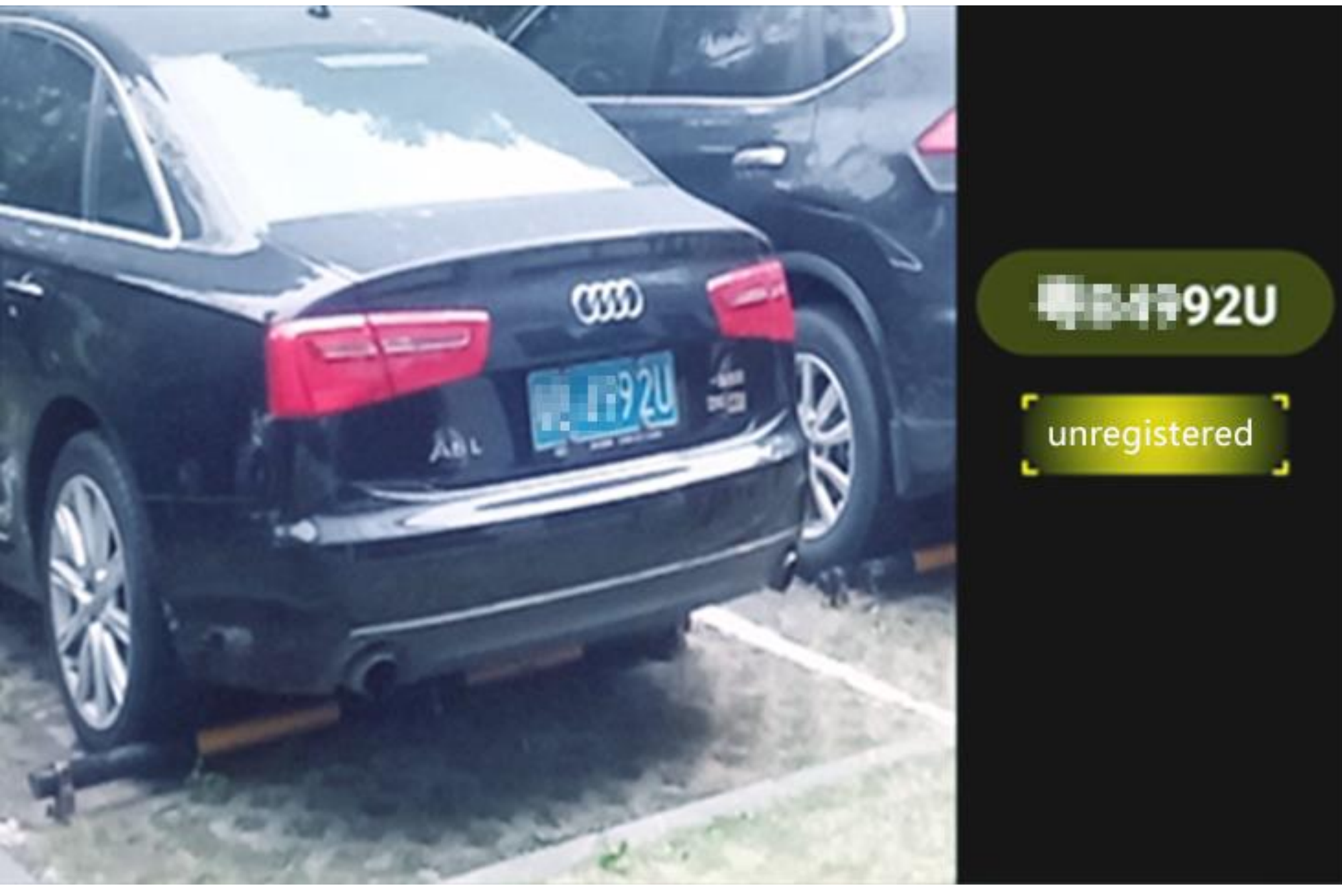
Scan the QR code to automatically record personal info into the database in real time, allowing paperless data logging.

QR code & temperature measurement mode

Scan the QR code to acquire the personal information first, and take a temperature measurement of the person within 3s. The personal information and the corresponding temperature will be automatically recorded into database. This will implement paperless registration of the personal information and the corresponding temperature.

License plate recognition mode[1]

Recognize the vehicle license plate , identify and alert unregistered vehicles or suspect vehicles recorded in database.



[1]License plate recognition is temporarily only available in mainland China, and could be customized for other countries when needed.

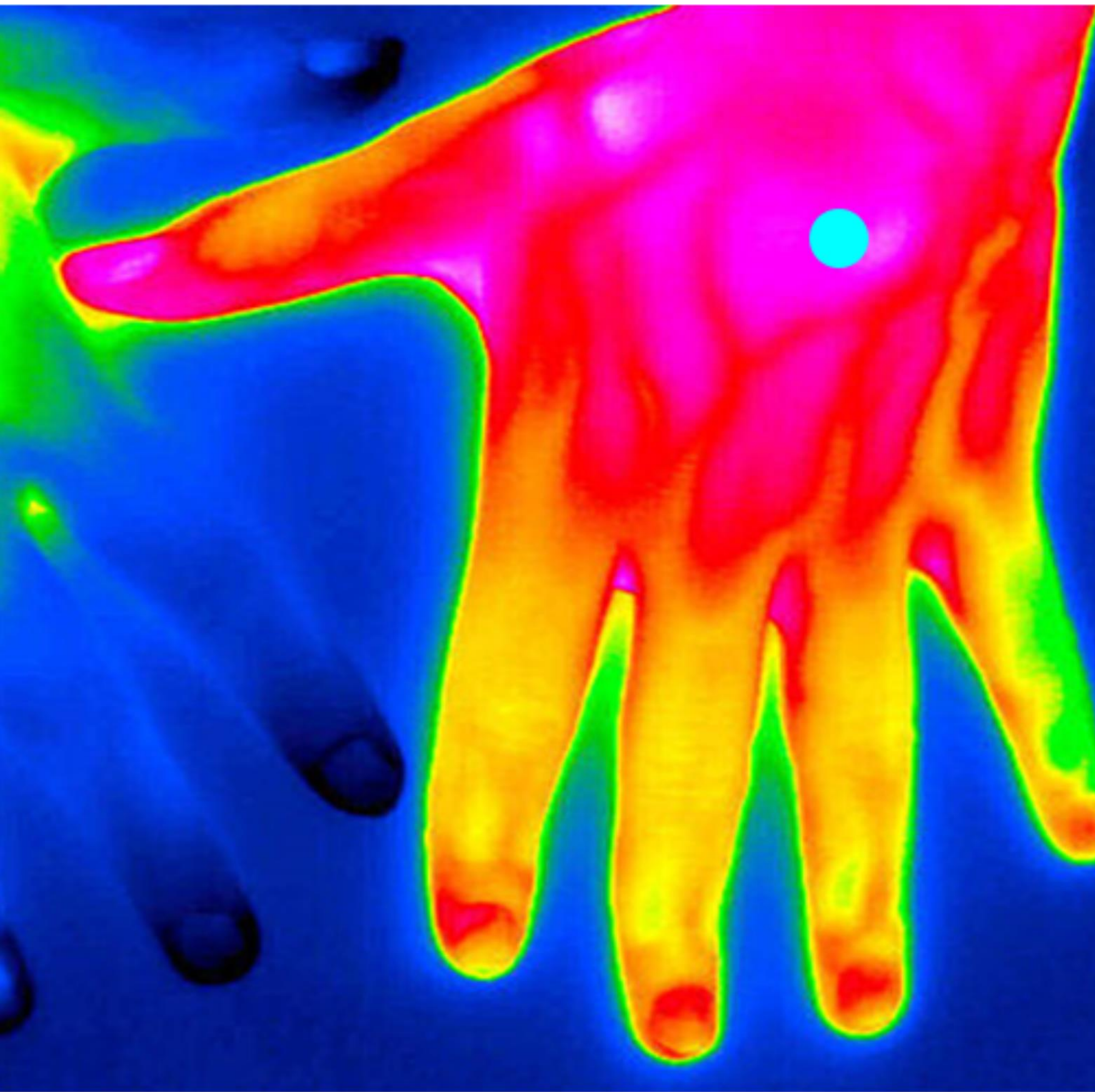
License plate recognition & temperature measurement mode [1]

Besides plate identification mentioned before, the helmet can measure the temperature of the single target in the center of the screen. The maximum temperature of different parts of the body is displayed on the AR module, and the temperature above the normal range will trigger an audible and visual alarm.

[1]License plate recognition is temporarily only available in mainland China, and could be customized for other countries when needed.

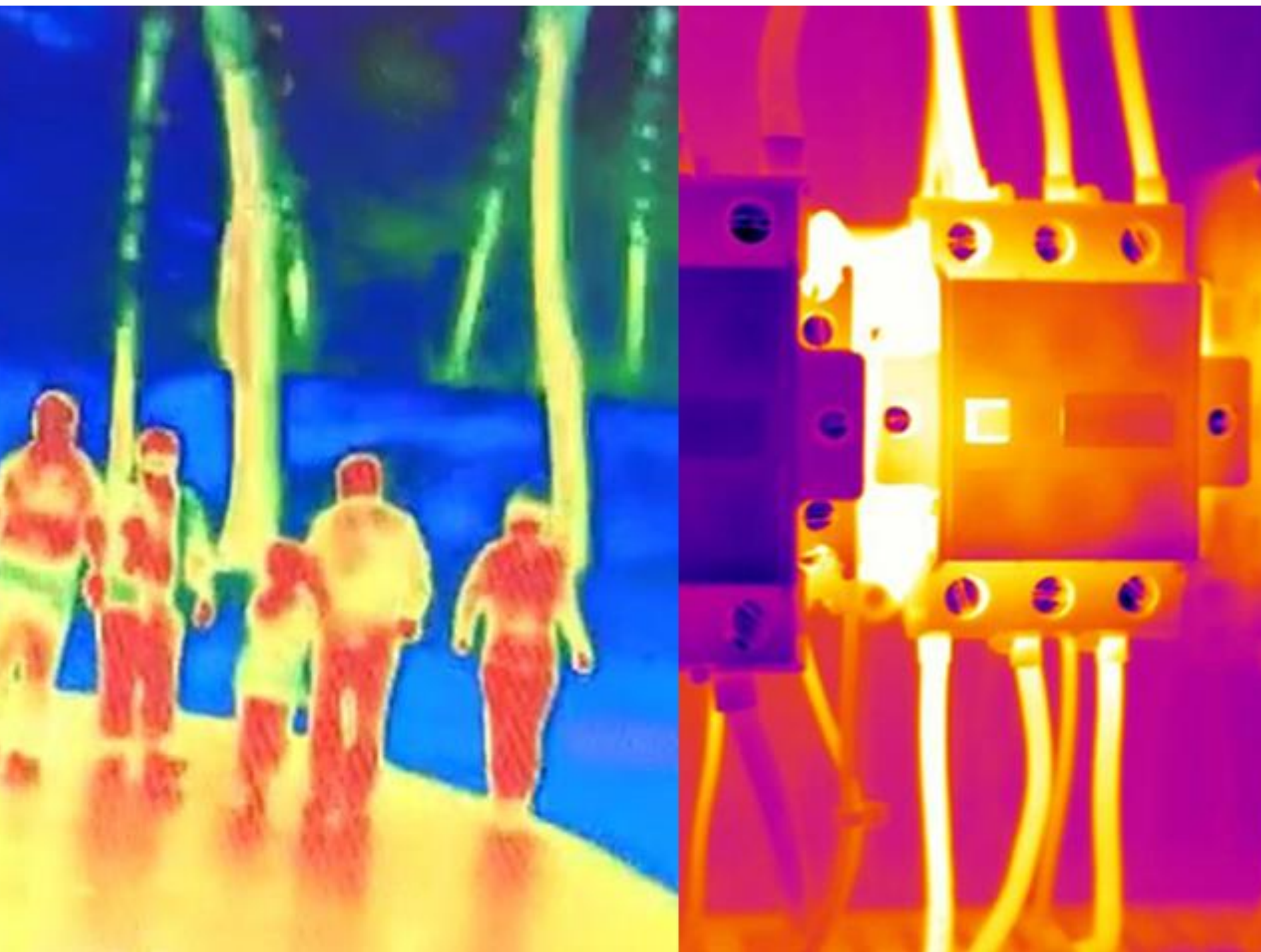
Thermographic diagnostic Imaging mode

Thermal imaging detection on specific parts of the human body to assist finding the location and size of the lesion areas that cause fever.



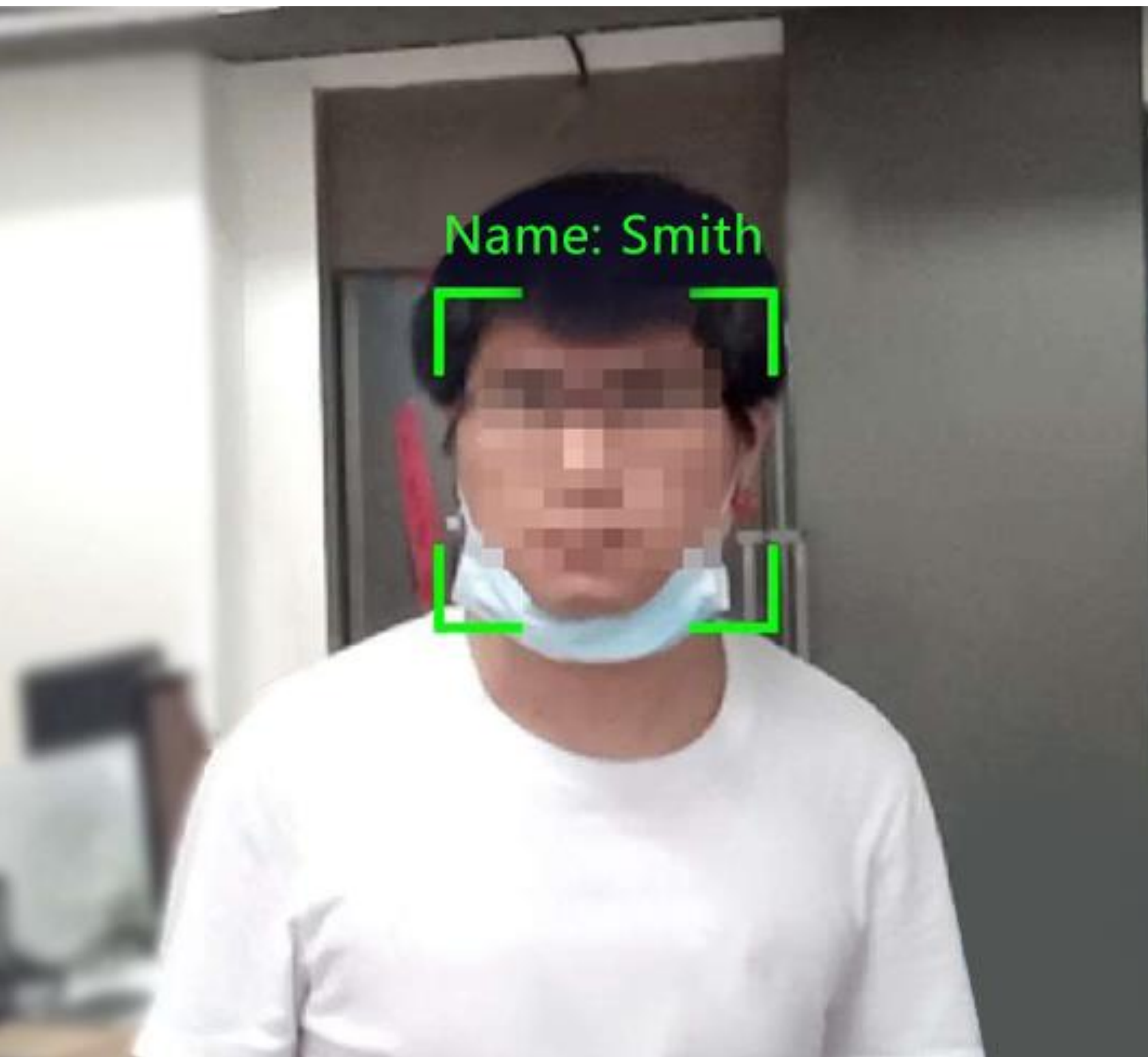
Night-vision /Facility inspection mode

Thermal imaging scanning of industrial facilities or establishments of night places, HVAC equipment, pipelines and electronic equipment, to assist finding target with abnormal temperature or searching for unauthorized person.



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.



Application Scenario

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 healthcare professional and potential fever patients.

Office Buildings

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

Checkpoints

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

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.

Product Features

Helmet Body

Advance stab-proof material with energy-absorbing design and ultimate weight reduction

115g (0.25 lb)
helmet shell weight

3kg (6.6lbs)
steel cone

1m (39.3inch)
free falling

1080g (2.38 lbs)
total weight

Impact without damage

Helmet Goggles

Same manufacturing process as helmet goggles for pilots

Advanced photochromic material with multiple protection

All-time capability with lighting conditions self-adaption

Air-borne Droplets

High-Speed Impact

Scratch

Fingerprint

Water Mist

prevent high-speed impact of 6mm (0.236 inch) steel ball at 200 m/s(656.2 ft./s) without rupture or penetration

200m/s

AR Display

High standard array optical waveguide AR technology, 24/7 new visual experience

as watching **74-inch** TV from 3m (118.1 inch) away

field of view: 35°

No Dark Corner, Blind Spot or Sense of Oppression

Rated Brightness: 300 nits

Infrared Thermal Imaging

High-accuracy quick unaware and contactless temperature measurement

Efficiency

200 people/min

Range

-20℃ (**-4**℉) to **120**℃ (**248**℉)

Accuracy

±**0.3**℃

Resolution

384×288

Smart Watch

Sporty and Stylish

Free Hands Completely

Configuration and Control of Smart Helmet without Mobile Phone

KCSH008
connected!

Communication

Advance material technology with strong signal, low power consumption and ultra-low radiation

conformal antenna **8-in-1**

Specific Absorption Rate

SAR < **0.05** W/kg(**0.023** W/lb)

only **1/20** of mobile phone radiation

Design of Gravity Center Balancing

Refer to the balance **design of aircraft** gravity center

Avoid the formation of cantilever structure in working state, so as to **protect the neck** to the greatest extent and **improve wearing comfort**

the range of the gravity center

c.g.diagram < **5** mm (**0.197** inch)

AI Capabilities

Support **offline face recognition and license plate recognition**

Support **QR code identification** for paperless registration

Battery Capacity

no less than

5000 mAh

Standby time

24 h

5 h

Temperature measurement mode [2]

[2]In most cases, we can turn off the AR screen with one key to reduce power consumption when there is no target for temperature measurement, and the measured endurance can reach 8 hours. In the continuous temperature measurement mode, the endurance is about 5 hours.

Ergonomics

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**

Product Specifications

Basic Information	
Processor	ARM Cortex A53 Octa-core 2.5GHz
Operating System	Android 8.1
RAM	DDR 4GB
Memory	eMMC 64GB
Weight	1080±10g (2.38±0.022lb)

AR Display	
Display	Array type optical waveguide display
Field of View	35°
Virtual Screen Size	Equivalent to watching 74-inch TV from 3m away
Rated Brightness	300nits

Infrared Thermal Imaging	
Resolution	384×288
Response Band	8m~14μm
Image Frequency-frame	25Hz
Temperature Measurement Range	-20℃~120℃ (-4℉~248℉)
Temperature Measurement Accuracy	±0.3℃ within the specified range (2m by default)

Visible Light Camera	
Maximum Pixels	13megapixels
Maximum Aperture	F2.0
Field of View	78°
Video Resolution	1080P@30fps

Product Specifications

Smart Watch	
Processor	ARM Cotex A7 Quad-core 1.3GHz
Operating System	Android 7.1
RAM	DDR 1GB
Memory	eMMC 16GB
Display	Corning Gorilla Glass4
Resolution	400×400

Data Communication	
Wi-Fi	IEEE 802.11b/g/n, 2.4GHz
Bluetooth	BT42, backward compatible with 3.0, 2.1, supporting BLE

Battery	
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
Specific Absorption Rate	SAR<0.05W/kg (0.023W/lb)
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