

ACU-S1

Smart Thermal Camera



COUNTERMEASURES



FEATURES

The **ACU-S1** is a Smart Thermal Camera from ACUSTEK as a part of a new R&D development to make thermal imaging smart. It has an open android platform making it an easy to use device to suit all level of thermal imaging users.

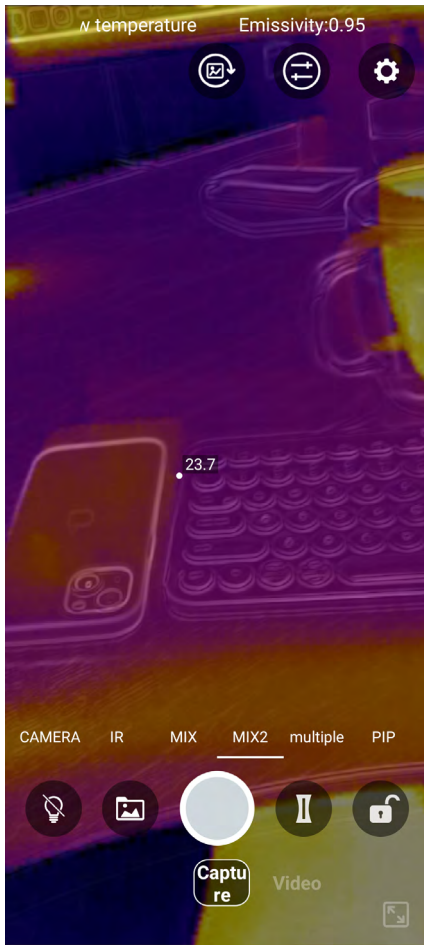
It has an 256x192 IR detector which will deliver 49,152 pixels to the end-users screen. It also features a 48MP Digital Camera allowing the device to be multifunctional. It has great storage for videos and images with a memory capacity of 256GB.

It also has a good temperature range of $-20^{\circ}\text{C} \sim + 550^{\circ}\text{C}$. With a measurement accuracy of $\pm 2^{\circ}\text{C}$ or $\pm 2\%$ of readings.

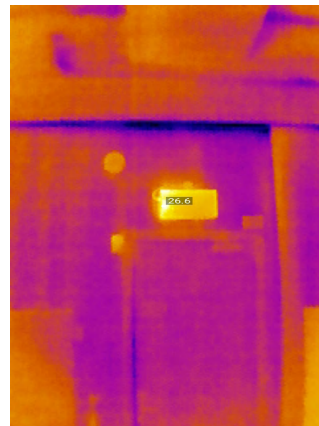
KEY FEATURES

- ▶ Smart Device Platform
- ▶ Open Android Platform
- ▶ Easy to Use Device
- ▶ 256x192 IR Detector
- ▶ 48MP Digital Camera
- ▶ Temperature Range of $-20^{\circ}\text{C} \sim + 550^{\circ}\text{C}$





Camera



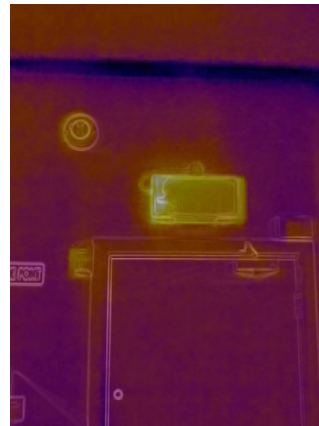
IR-infrared light



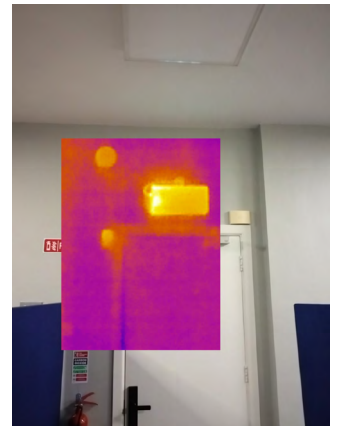
multiple



MIX
Infrared and Visible Image
Fusion with Hybrid Image
Filtering



MIX2
Infrared and Visible Image
Fusion with Hybrid Image
Filtering



PIP
Picture in
picture



MIX eliminates the need to take additional visible light reference images, and can make it easier to demonstrate to clients what and where the problem is.



Thermal Camera

Detector Type:	UFPA
Detector Resolution:	256x192
Pixel Size:	12µm
Field of View:	55.6°x 42°

Measurement

Temperature Range:	-20°C ~ + 550°C
Accuracy:	±2°C or ± 2% of readings

Device System

CPU:	Qualcomm Snapdragon SM 4350 (Snapdragon 480 5G platform)
CPU frequency:	Octa-core 2xGold(A76 based)+6x Silver(A55 based)
Operating system:	Android 11 (support OTA system upgrade)
Memory capacity:	256GB eMMC + 8GB DDR4
Screen display:	6.57-inch FHD+ (20:9 full screen), resolution 2520X1080
Rear camera:	48 (64) MP main camera + 8MP depth of field. Support photo, video, panoramic photo, Auto focus, auto flash, HDK, continuous shooting, etc.
Battery capacity:	5000-5500mAh, Support fast charge QC4.0 (built-in battery)

Image Presentation

Image mode:	Infrared/Visible/Fusion
Flash:	Support + flashlight

Image Storage

SIM Type:	Two nano cards
Add-in card type:	Support Micro TF

Physical Characteristics (Camera Body)

Encapsulation:	IP68
Shock/Vibration Resistance:	25G
Size:	81.5mm x170xmm12+0.5mm

Additional Features

5G data connection:	5G NR X51 modem (speed Depends on mmWAVE or Sub 6)
4G data connection:	DL:2.0Gbps CAT20/UL:316Mbps CTA13
Fingerprint:	Side fingerprint
GPS:	Support GPS/Glonass/Galileo/Beidou+A-GPS
WLAN/Wifi:	802.11 b/g/n 2.4 GHz802.11. a , 5 GHz802.11.ac, 5 GHz
Bluetooth:	Bluetooth 5
Colour:	Black