

Instructions and User Guide of Infisense FS256 Pro Automatic Double-light Screening System



Infisense FS256 Pro automatic double-light screening system can conduct non-stop batch capture of infrared temperature and visual image in densely-populated places. FS256 Pro adopts advanced AI face recognition technology and reliable infrared temperature measurement algorithm, and acquires the temperature through non-contact form at a distance of 4 meters at most. Once it finds over-temperature targets, it will alarm automatically and store the photo.

No.	Edition	Description	Date
1	V0.0	First edition	2020/05/18
2	V0.1	Add installation instructions and software use instructions	2020/05/21

Areas of application

This product is suitable for public places and densely-populated places, like airports, stations, factories, etc.

■ Product specification

Infisense FS256 Pro Automatic Double-light Human Body Thermometer	
Product model	FS256PRO
Infrared part	
Resolution	256*192
Pixel size	12μm
NTED	≤50mK
Frame rate	25hz
Focal length	3.2mm
Field angle	56°*42°
F#	1.1
Visible part	
Resolution	1280*720
Field angle	FOV 80°
Focal length	4.4mm
Accuracy of temperature measurement	
Measuring range	30~45°C
Accuracy of measuring temperature	±0.5°C (Environment temperature 10°C~40°C)
Temperature measurement range	≤4m
Machine interface	
Machine interface	HDMI
Power	
Power input	AC100-240V 50/60Hz 0.5A
Power output	DC5V 3A
Software function	
High temperature alarm	High-temperature alarm and image capture
File export	Support history inquiry, screening and export to local disk
Live preview	Live preview of visible and infrared image
Face recognition	Intelligent face recognition and tracking
Parameter setting	Pseudo-color selection, alarm, language and correction value setting
Environmental suitability	
Working temperature	10~50°C (Environment temperature 10~40°C accurate temperature measurement)
Storage temperature	-20~60°C
Packing specification	
Machine head size	190mm*110mm*100mm
Packing size	394*194*153mm
Net weight	1420g (the actual shipment shall prevail)

Gross weight	1784g (the actual shipment shall prevail)
Tripod size	Folding size: 540mm Unfold height: 1560mm

Table 1 product specification

* Technical parameters are for reference only. If there are changes, actual parameters shall prevail, and there won't be further notice.

■ Assembly list

No.	Type	Parts name	Quantity	Position in picture
1	Double-light tube machine	Double-light tube machine	1	①
2	Power adapter	Power adapter (5V 3A)	1	②
3	Centrally-controlling machine set	Centrally-controlling machine	1	③
4		Centrally-controlling machine remote control	1	③
5		HDMI cable	1	③
6	Assembly parts	Tripod screw	1	
7		L type wrench	1	
8	Tripod (optional)	Tripod	1	

Table 2 components list



Fig. 1 packaging

■ Installation method


Please assemble all parts according to the following method.



Fig. 2 centrally-controlling machine and interface



Fig. 3 double-light tube machine and interface

- (1) Please install the tube machine in an appropriate place, for instance, on a tripod, adjust the tube machine to face the monitoring channel and be flush with people's height. Deviation between the tube machine and the channel, as well as height deviation will impact the effect of monitoring;
- (2) Behind the tube machine, there are two USB cables, one is double-end visible device connecting cable (cable 1), and the other is single-end infrared thermal imaging device connecting cable (cable 2). Please insert the two cables into USB interfaces in the back and on the side of Android box (USB interface, 1, USB interface, 2);
- (3) Please connect one end of HDMI cable to Android box (HDMI interface, A), and the other to a television / displayer with audio functions;
- (4) Insert the power supply cord to the Android box (round interface, B), wait for starting up and enter the main interface.
- (5) In order to use the software normally, please connect the centrally-controlling machine to the Internet in the following process:
 - a) Open the back cover of the remote control of centrally-controlling machine, and put two triple-A batteries in
 - b) Click "homepage ", use the direction key to select "setting", select and click Wi-Fi button in the menu
 - c) Choose your Wi-Fi and enter password, and the centrally-controlling machine will get time information automatically after being connected to Wi-Fi.

■ Software use instructions

- (1) Open the software

The software will run automatically after the Android box is powered on, and you can also choose to enter FS256 Pro app through remote control. When first using the Android box or re-installing app, the app needs to re-get permission, and in such a condition, you cannot enter the app automatically, please select FS256 Pro manually or allow app to access permission.

- (2) Software interface



Fig. 4 software interface

Name of the software is displayed on the upper left, while the stream of people (including total number of people examined and alarm times) and time information are displayed on the right. Setting and help buttons are on the lower left of the interface, visible HD image is on the left of the middle of interface, infrared real-time frame is on the right of the middle of interface, recently examined people and temperature are displayed at the bottom of the interface.

Detailed image-text is as follows:

a) Visible HD image

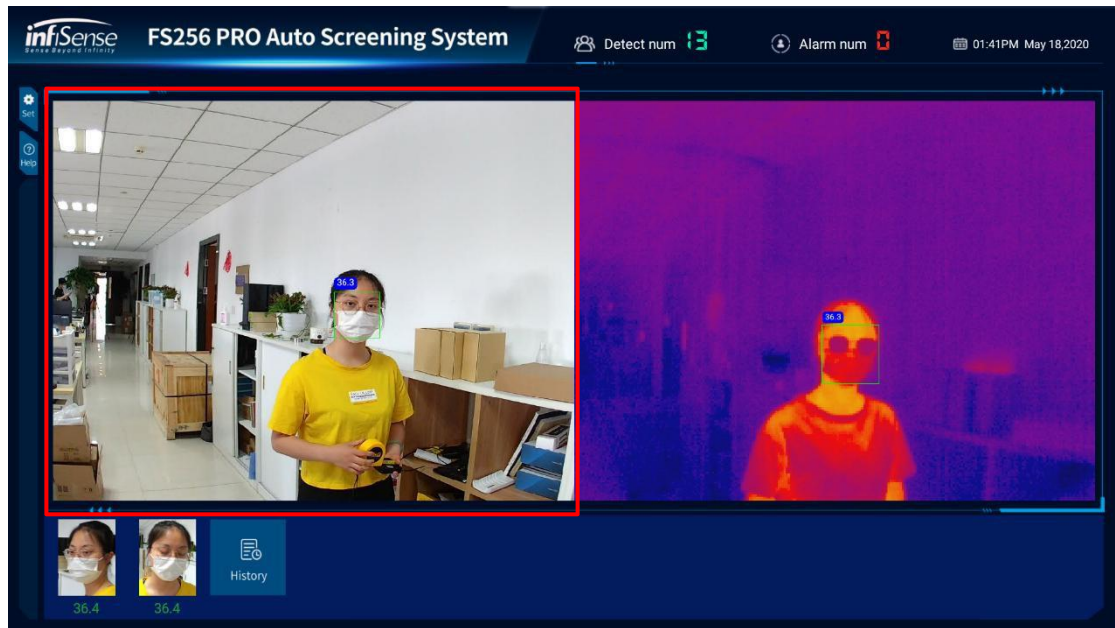


Fig. 5 main interface of the software - visible image area

On the left of the interface, it is the real-time visible image, and the software will recognize and outline the human face. When the human face is within the infrared image observation range, real-time temperature measured will be displayed. The software supports multi-face recognition (10 faces at most).

b) Infrared image display

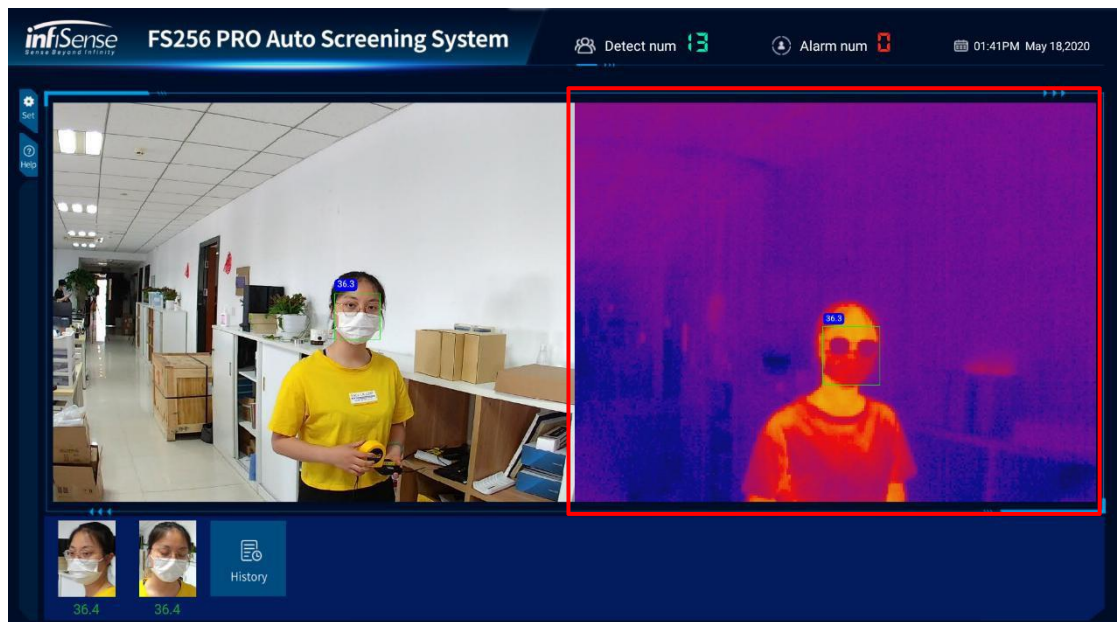


Fig. 6 main interface of the software - infrared image area

On the right of the interface, it is the real-time infrared image, displaying the infrared image and corresponding temperature of detected human face.

c) Display of the information of stream of people detected

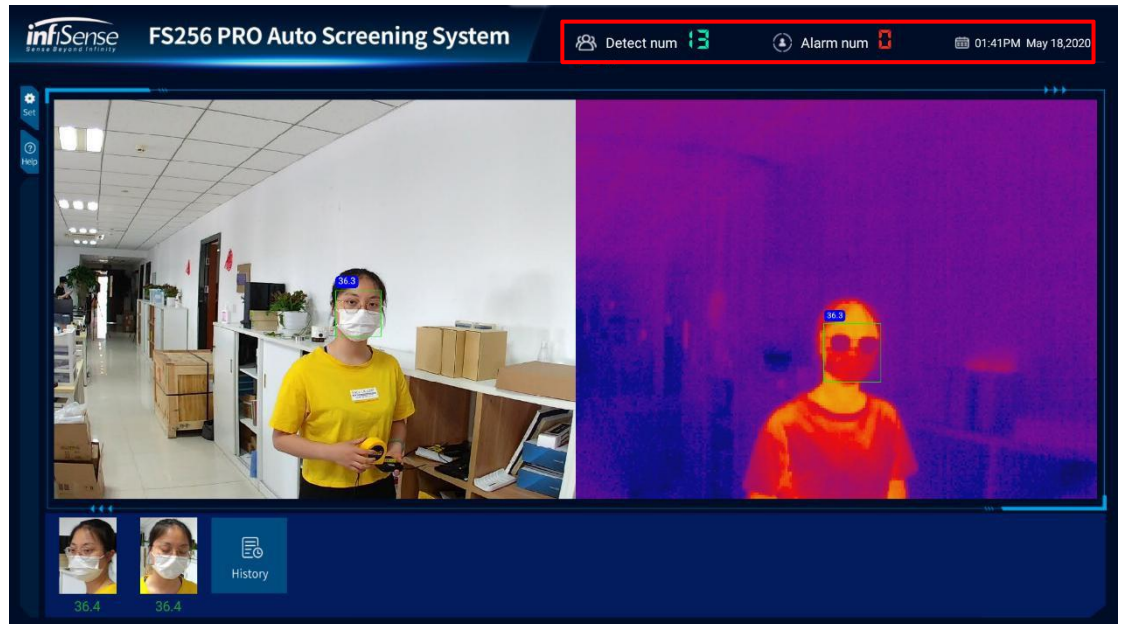


Fig. 7 main interface of the software - information of stream of people detected

On the upper right of the interface, “Detect num” shows the total number of people detected by the software today, “Alarm num” means the number of people of abnormal temperature, and "keypad" icon button shows the current date and time (it can only be acquired at real time through the Internet).

d) History

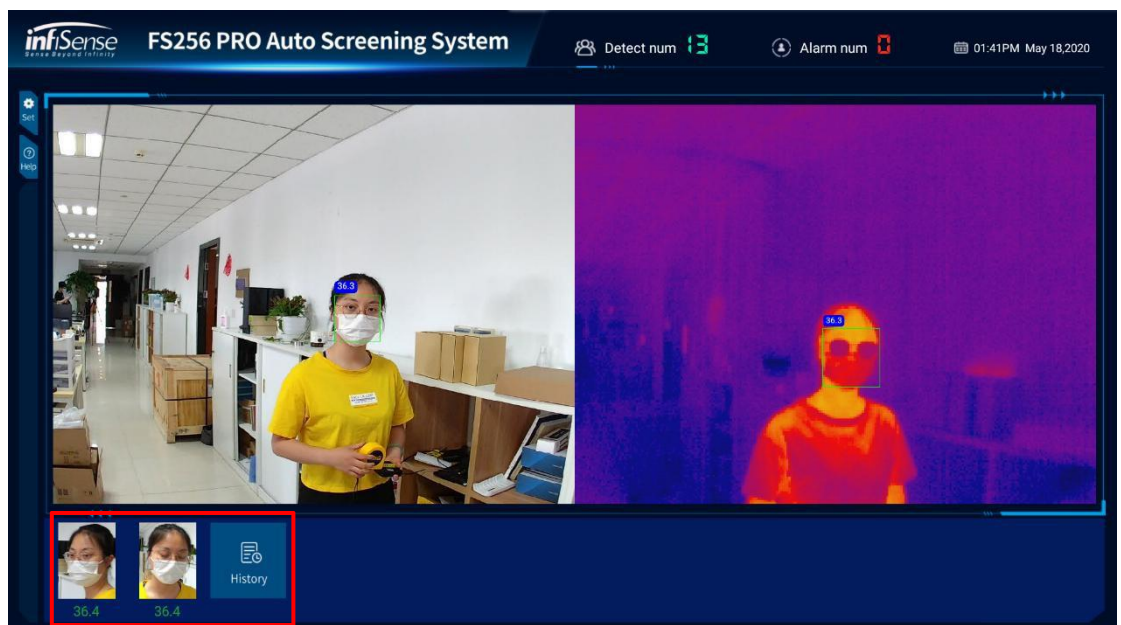


Fig. 8 main interface of the software - history area

Below the main interface, passerby and recorded images and their highest temperature will be displayed. Click mouse button to enter the mouse mode, move the mouse to "history" and press "OK" on the remote control to enter the history

interface, where all images recorded will be displayed. Those in green background box are with normal temperature, while those in red are with abnormal temperature.

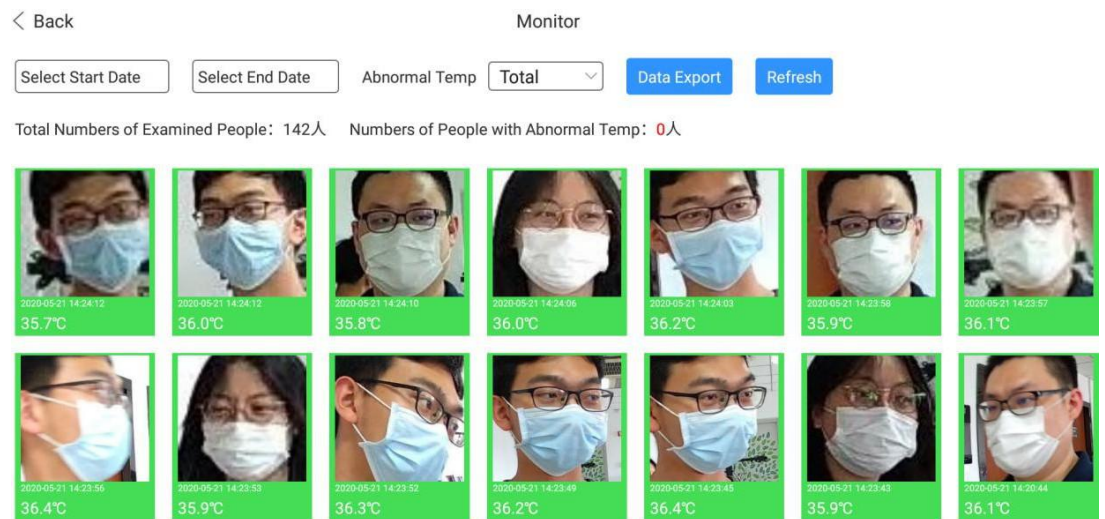


Fig. 9 history interface

Start date and end date for display can be selected through Select Start Date and Select End Date. In the drop-down menu of abnormal temp, three display modes can be selected: total, normal or abnormal. Click Data export to export all records, and export results are placed in FS256_export file folder.

e) Parameter setting

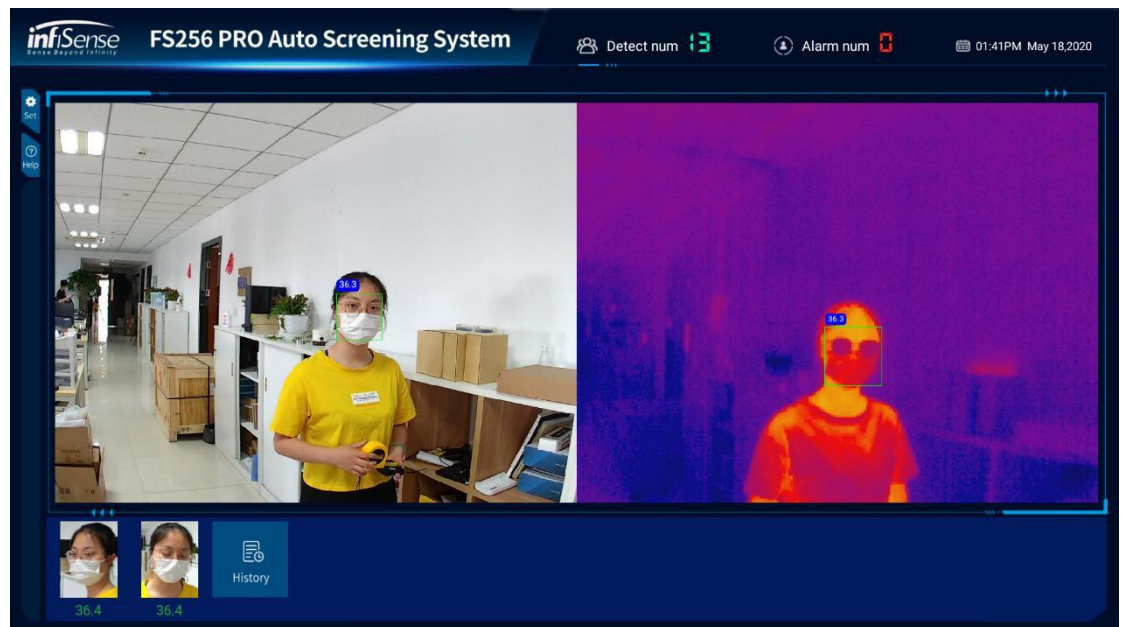


Fig. 10 main interface of the software - setting

Click "Set" button on the left, "setting interface" will pop up. The setting interface includes two parts, infrared image setting and system setting.

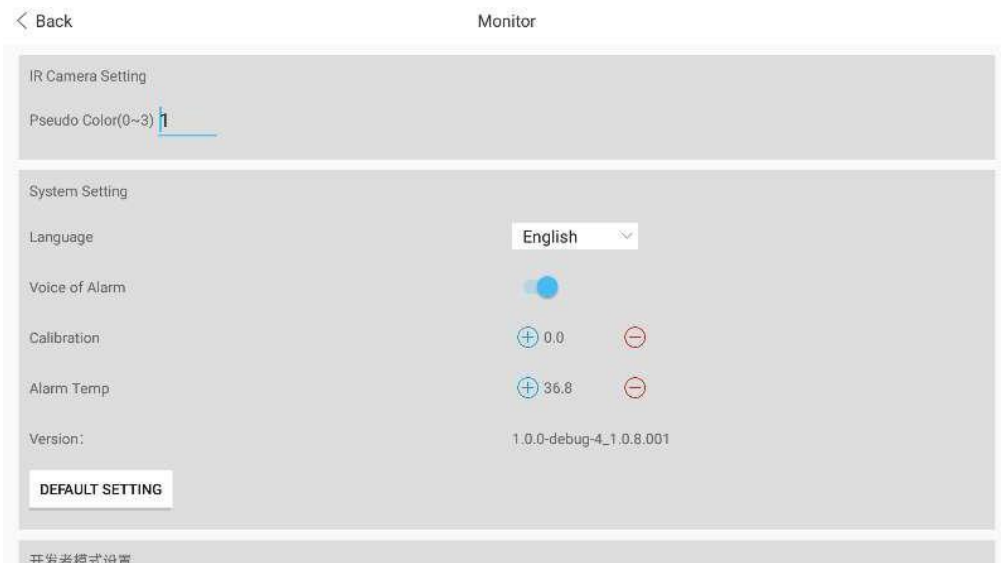


Fig. 11 software setting page

List of detailed functions is as below:

Category	No.	Setting	Description	Min	Max
IR Camera Setting	1	Pseudo Color	Customized as pseudo-color, it has four modes, the default is 1, infrared mode	0	3
System Setting	2	Language	Language setting, Chinese / English		
	3	Voice of Alarm	Open the alarm sound or not		
	4	Calibration	Calibration value, for compensating the great difference between the temperature measurement and actual conditions, unit: Celsius degree, taking 0.1 as the step length	-5.0	5.0
	5	Alarm Temp	Alarm value, set alarm threshold, and it will alarm once the temperature is over this value	36.0	38.0

Table 3 Setting description

f) Help button

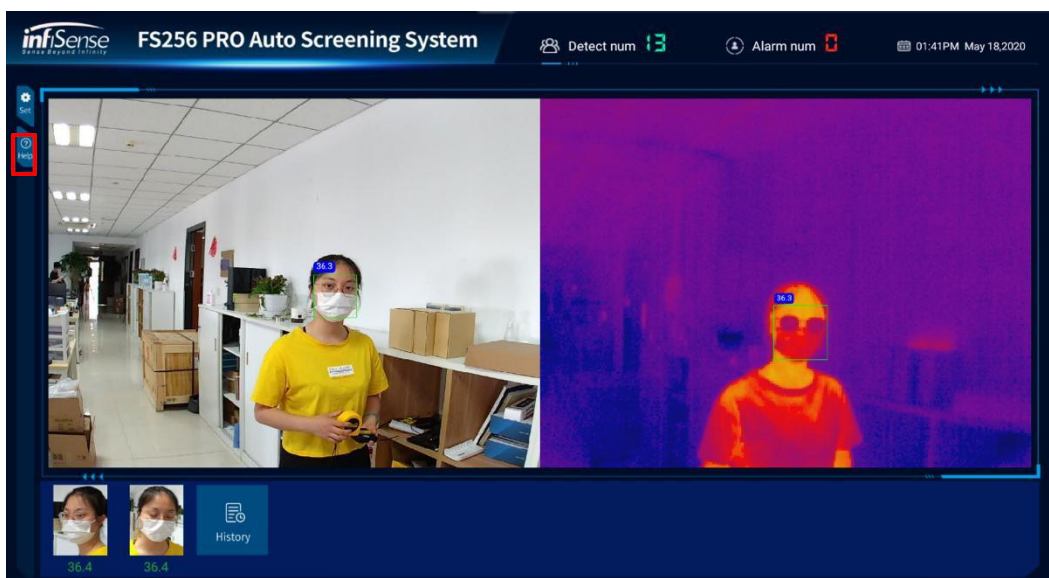


Fig. 12 main interface of the software - help area

Click the help button, and it will display the help page. Please debug the software by yourself according to the guideline.

■ Points for attention

- (1) Please do use the self-contained power adapter for power supply, to guarantee personal safety and product life.
- (2) Please do not put the product in a humid place or wash it, to avoid leakage of electricity or short circuit.
- (3) Please do not remove parts arbitrarily, which may result in equipment failure or safety accidents.
- (4) When the machine is not used for a long term, please put it away and keep it in a dry environment.

■ Contact us

Geekland USA, LLC is a distributor of InfiSense's thermal imaging products in the US and North American markets. Geekland USA, LLC (<http://www.geekland.co>) is a privately owned and funded company established in Atlanta, GA, USA in 2010 with a focus on providing custom OEM/ODM services and solutions that include industrial HMIs, digital signage systems, embedded systems, temperature scanners, access control systems and IOT systems. Our mission is to help our customers to help develop, manufacture and market smart devices incorporating cutting-edge emerging mobile, display and IOT technologies to gain a competitive edge. In addition to providing ODM service, Geekland markets and distributes industrial Android tablets, panel PCs, rugged hand-helds and digital signage systems within the US market.

For product information and support contact us at
Geekland USA, LLC
1100 Peachtree Street, Ste 200
Atlanta, GA-30309
support@geekland.co
Call us at 1-(877) 597-7673