USER MANUAL

TD1001 Smart Counting Sensor

Quick Configuration Guide

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Introduction

The TD1001 Smart Counting Sensor is a breakthrough product and all-in-one 2D device which possesses an ideal balance of technical proficiency and cost effectiveness in the people counting market. It can be widely used by brick and mortar real estates, shopping centers and retailers for traffic data capture, analysis, storage and delivery.

The TD sensor technical documentation suite includes:

- ✓ *TD1001 Smart Counting Sensor Quick Start Guide*
- ✓ ***TD1001 Smart Counting Sensor Quick Configuration Guide (this document)***
- ✓ *TD Remote Control Server User Guide*

About this Document

The TD1001 Smart Counting Sensor Quick Configuration Guide details basic configuration instructions for IT departments and implementation engineers. For advanced configurations, contact our technical representatives for assistance.

Prerequisites for Configuration

Before attempting to configure the sensor, make sure that you have installed TD1001 Smart Counting Sensor hardware components by following the steps as described in the TD1001 Smart Counting Sensor Quick Start Guide.

TD1001 Smart Counting Sensor Web Interface

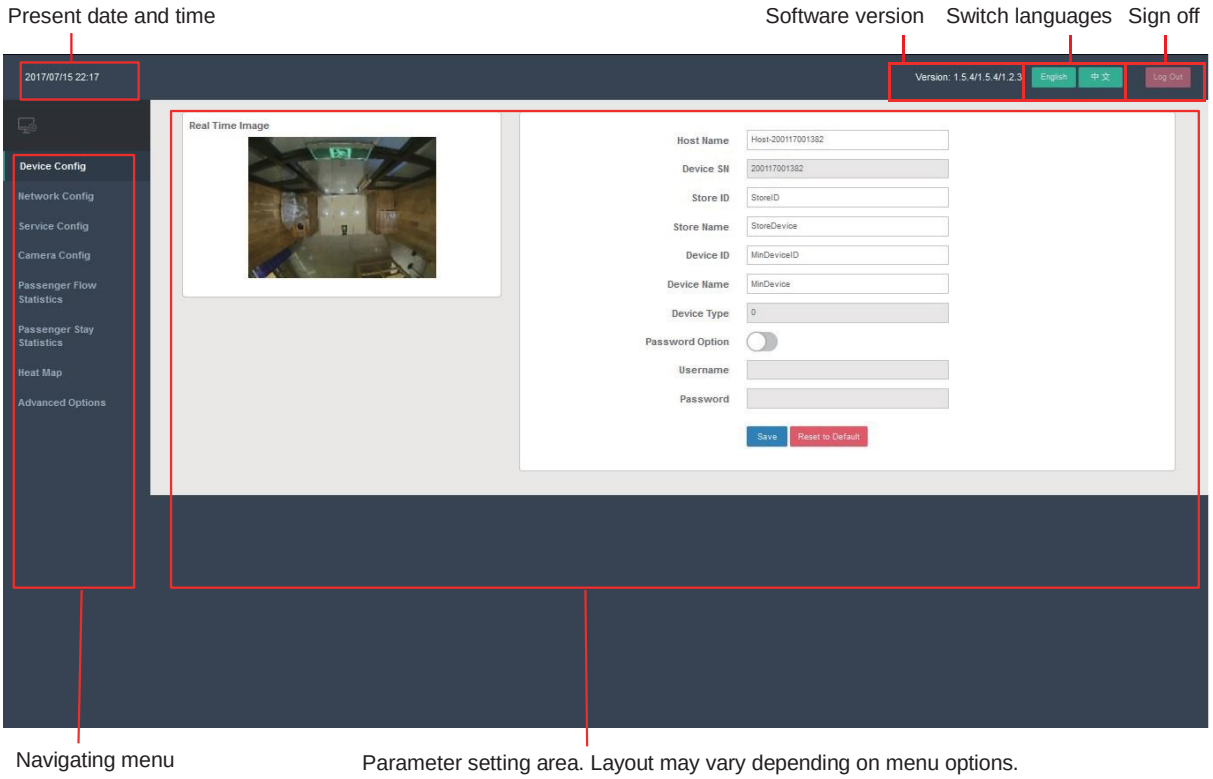
Using the Web Interface

The TD1001 Smart Counting Sensor includes the browser-based web interface, which allows you to configure and manage the sensor directly.

To fully access the web interface, your computer shall be installed with Internet Explorer 10.0 or newer, or latest version Google Chrome or Mozilla Firefox.

Accessing the Web Interface

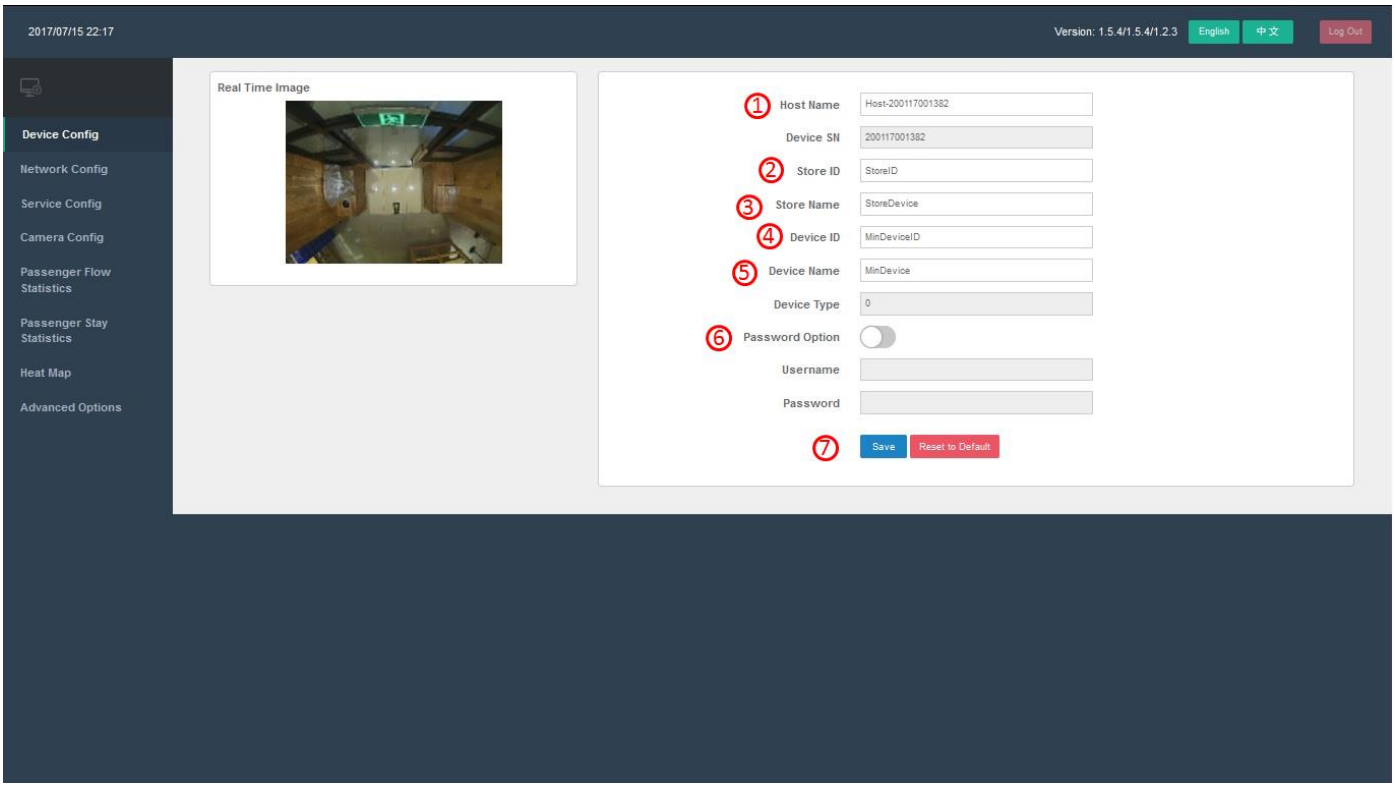
To access the web interface, use the default IP address of 192.168.1.8. All sensors are shipped to customers with this default IP address. Input it into browser address bar, then access into the following setting page.



Configuring TD1001 Smart Counting Sensor

Once you access the web interface, navigate the menu options on the left side and start configuring all necessary parameters by following the forthcoming instructions.

Device Configuration



① **Host Name**: Enter the Hostname for the sensor on your network.

② **Store ID:** Enter the customer-specific classification for a store or site number.

③ **Store Name:** Enter the customer-specific classification for a store or site number, often a reference to the city or locale where the store is.

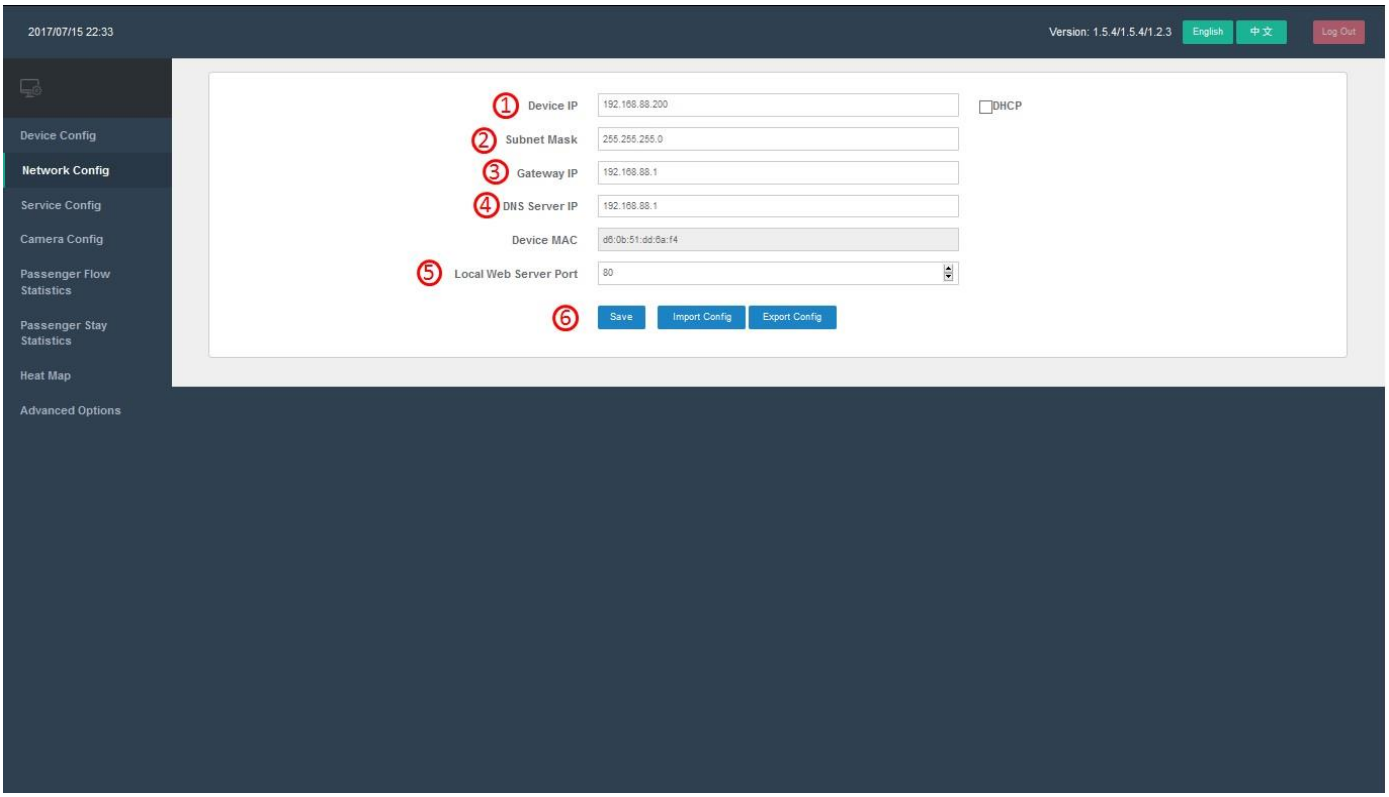
④ **Device ID:** Enter an alphanumeric code to uniquely identify the sensor within a site.

⑤ **Device Name:** Enter a brief name for the sensor that is derived from Sensor ID.

⑥ **Password Option:** Sensor can be password protected to prevent unauthorized users from accessing the web. Enable Password Option then input the username and password, click **[Save]**.

⑦ **[Save]:** Use the permanent, non-volatile memory (Flash) of the sensor to store the effects of a change.
[Reset to Default]: Restore the current values back to the factory defaults. The values are not permanently saved until you click the **[Save]** button.

Network Configuration



① **Device IP Address:** Enter the IP address for the sensor on your network. Default IP Address is 192.168.1.8. **DHCP** is supported.

② **Subnet Mask:** Enter the Network Mask for the sensor on your network.

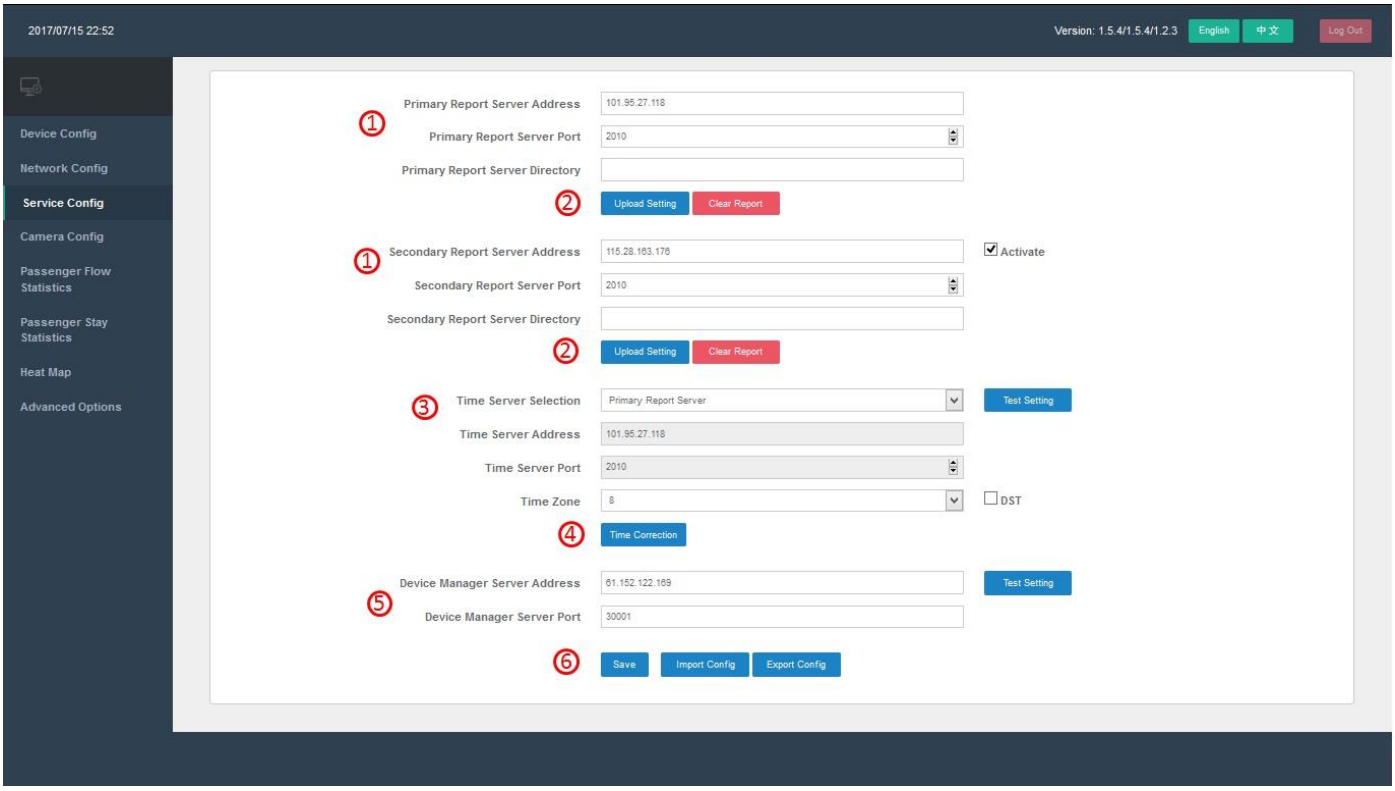
③ **Gateway IP:** Enter the Default Gateway IP address for the sensor on your network.

④ **DNS Server IP:** Enter the DNS (Domain Name System) Server for the sensor on your network.

⑤ **Local Web Server Port:** Enter the Port number for the sensor for HTTP/HTTPS communication.

⑥ **[Save]:** Store the effects of a change.
[Import Config]: Click the button, a pop-up window will appear for you to select the configuration file that you created and exported before for easy setting up.
[Export Config]: Click the button to export current network settings and save the file in your specified directory for future use.

Service Configuration

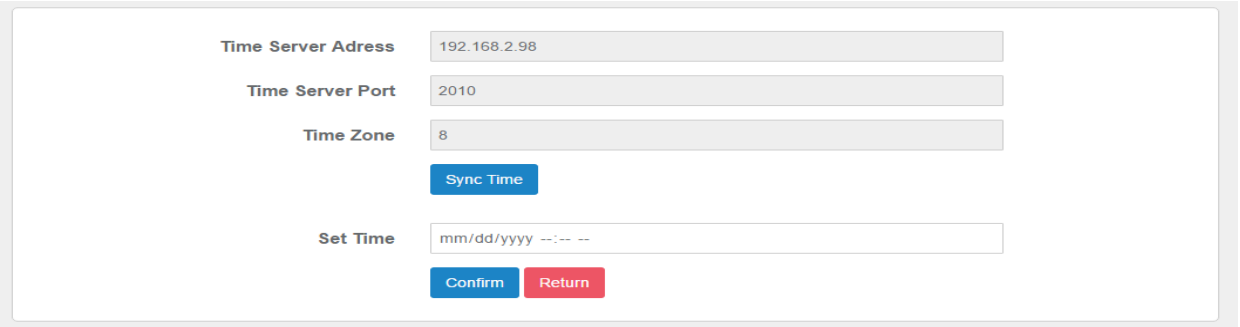


① **Primary/Secondary Report Server IP:** Enter the primary/secondary data delivery destination server. Make sure to tick **Activate** if you will use Secondary Report Server.
Primary/Secondary Report Server Port: Enter the primary/secondary server port number to which the sensor should attempt to deliver data.
Primary/Secondary Report Server Directory: Enter your specified primary/secondary report server directory. (Note that server end configuration also needs to be set, contact our technical representatives for details).

② **[Upload Setting]:** Click the button into the Upload Setting page to set parameters for uploading reports to the Primary/Secondary Report Server respectively.
[Clear Cache Report]: Clear all historical count data.

③ **Time Server Selection:** Specify the server that you wish to use its time for synchronizing the date and time on the sensor by selecting from the listed options (Primary Report Server, Secondary Report Server, NTP Server).Click **[Test Setting]** to see if the connection with your selected server is successful or not. You can set the time zone and activate **DST** based on the physical locations of devices.

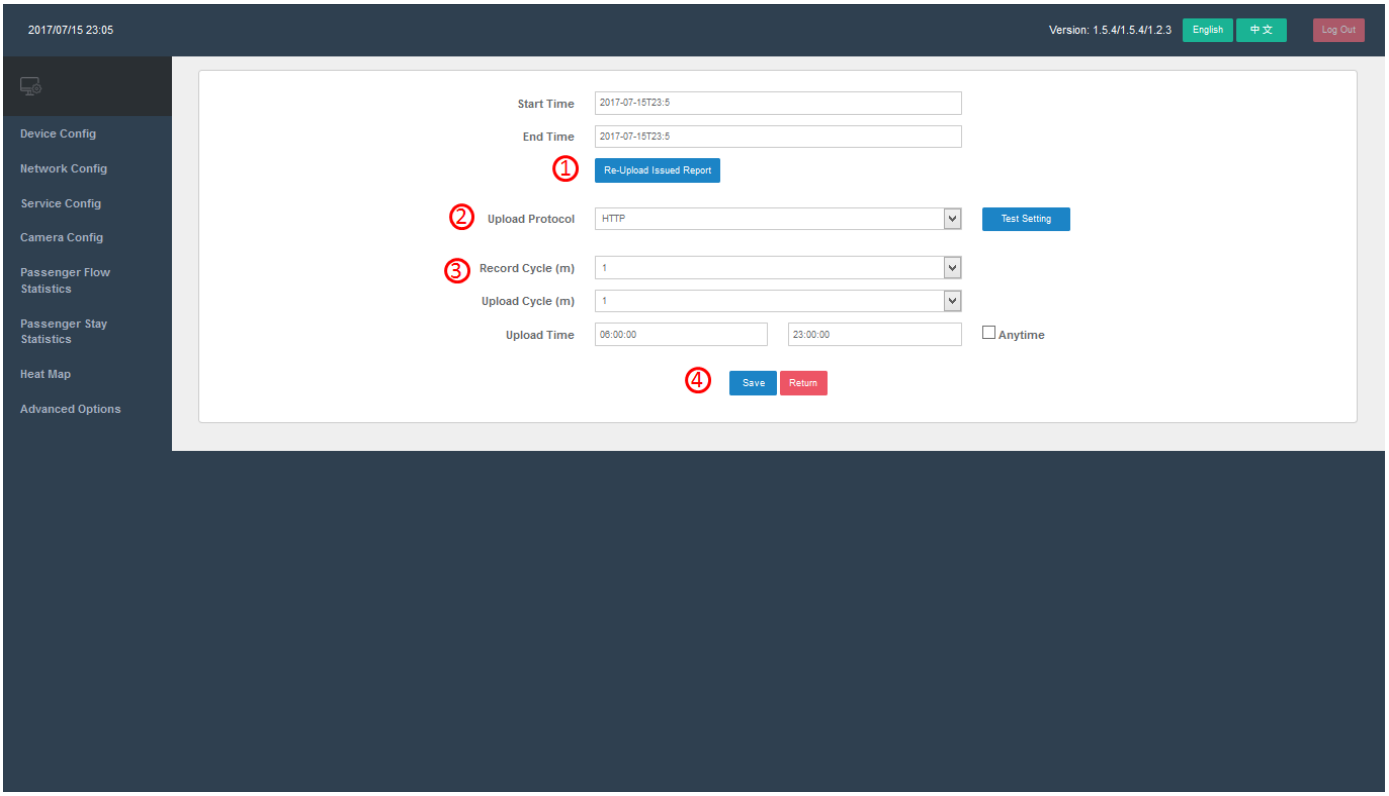
④ **[Time Correction]:** Click the button, a pop-up window will appear. Click **[Sync Time]** to synchronize the date and time of the sensor with your selected server under proper functioning network situation. If there is no server connected on the site network, set time manually in **Set Time** and click **[Confirm]**. Note that this is a one-time setting when time synchronization is not used, which is subject to time drift.



⑤ **Device Manager Server Address/Port:** Enter the IP address and Port number of your Device Manager Server. Click **[Test Setting]** to see if the connection with your device manager server is successful or not.

⑥ **[Save]:** Store the effects of a change.
[Import Config]: Click the button, a pop-up window will appear for you to select the configuration file that you created and exported before for easy setting up.
[Export Config]: Click the button to export current service settings and save the file in your specified directory for future use.

Upload Setting



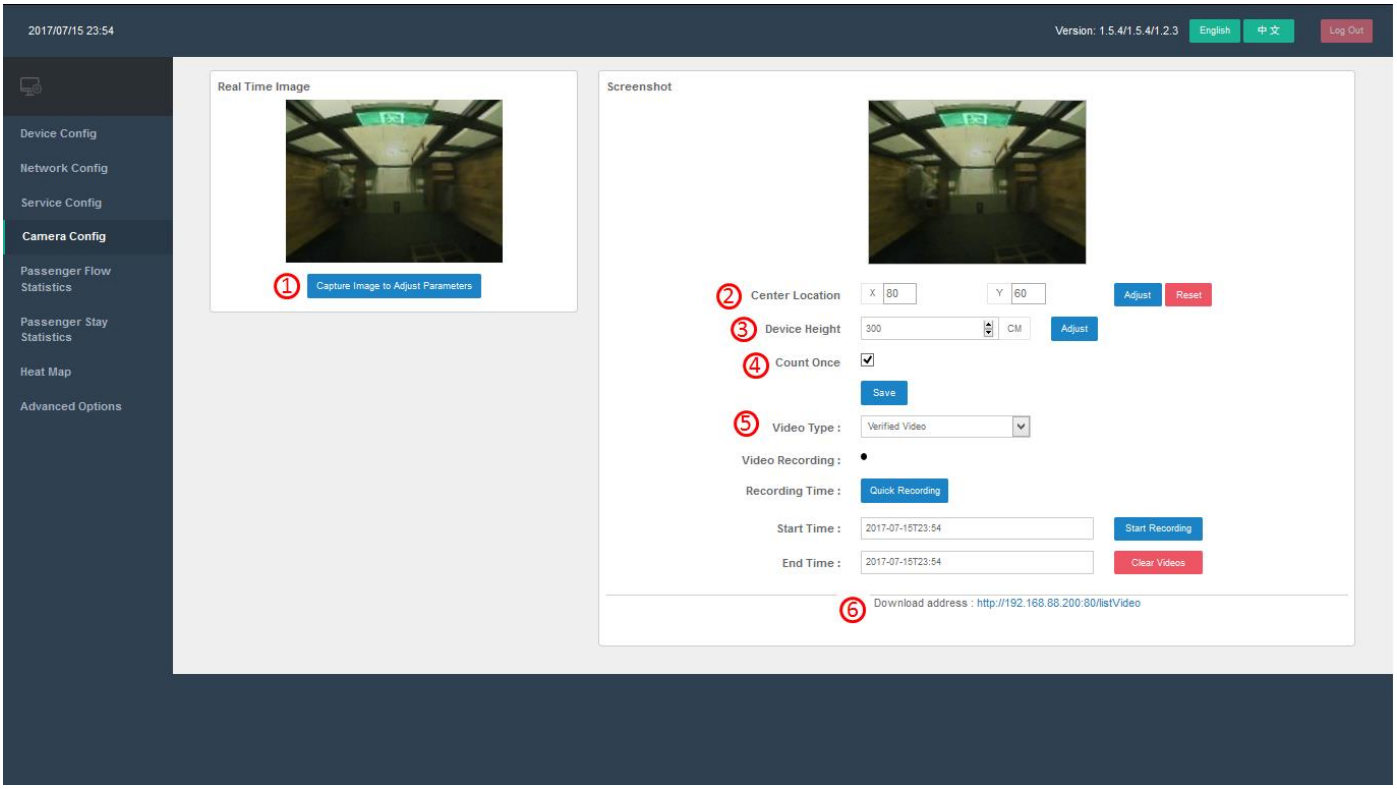
① **[Re-Upload Issued Report]:** Sensor can create on-demand report delivery requests for a specific range of dates and times in a designated format. This operation only resends data within 90 days and can't resend if cached data has been cleared. Set the **Start Time** and **End Time** accordingly and then click **[Re-Upload Issued Report]** for report delivery.

② **Upload Protocol:** Specify the protocol for uploading reports by selecting from the listed options **(HTTP, HTTPS, FTP, FTPS).**

③ **Record Cycle(min):** Select a record level for the count report (1 min, 5 mins, 10 mins, 15 mins and 60 mins).
Upload Cycle(min): Select an upload level for the count report (1 min, 5 mins, 10 mins, 15 mins and 60 mins).
Upload Time: Select data upload time. By default, **Anytime** is checked.

④ **[Save]:** Store the effects of a change.
[Return]: Return to the previous main page.

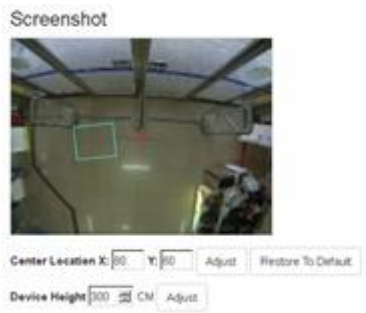
Camera Configuration



① **Crop Image to Adjust Parameters:** Take a quick screenshot for adjusting parameters. By clicking the button, the most recent snapshot image will appear on the right side.

② **Center Location:** Use the default settings (X: 80, Y: 60) when the sensor is installed perpendicularly. Click **[Adjust]** to relocate the center location on the screenshot when the sensor is installed with an angle (within 10 degrees). Make sure to click **[Save]** to turn the adjusting effective.
[Reset]: Restore to default settings (X: 80, Y: 60).

③ **Device Height:** Manually set the sensor height within the range of 250cm-500cm and based on the height of installation on site. Click **[Adjust]** to adjust the height value as set. Notice that a square will appear for facilitating proper height setting. If the square can rightly frame an adult, the height is set as proper. Decrease the height value when the square cannot frame an adult, increase otherwise. Make sure to click **[Save]** to store the adjusted height.



④ **Count Once:** This function is provided in order to set the sensor to only count people once if they cross over enter and exit areas multiple times while in the sensor field of view. If the count once box is not selected, a single person can cause multiple enter and exit counts if they stay in sensor field of view and cross over the enter and exit areas multiple times. single person can cause multiple enter and exit counts if they stay in sensor field of view and cross over the enter and exit areas multiple times.

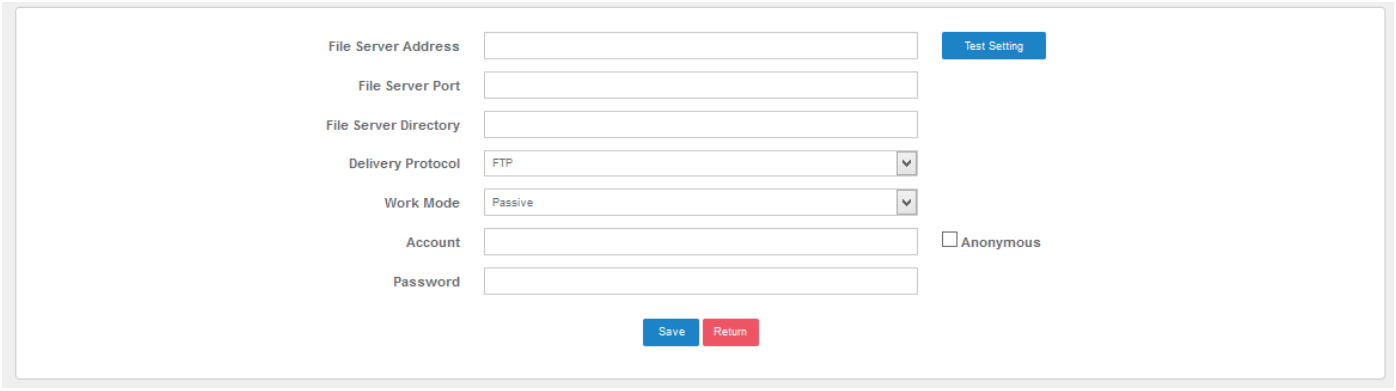
⑤ **Video Type:** Verify video and original video can be selected to record.
Video Recording: Showing recording status.

- The sensor is not recording
- The sensor is recording

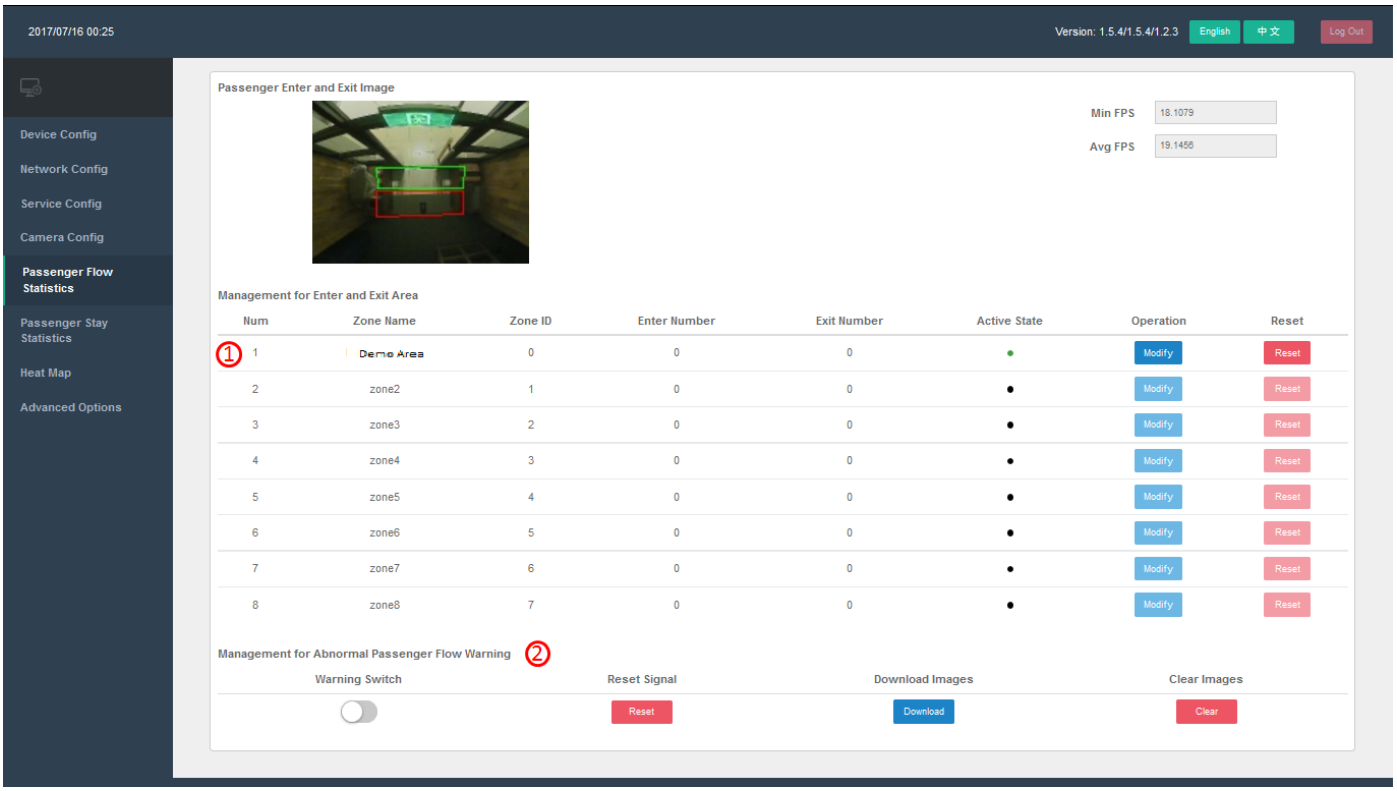
[Quick Recording]: Click the button to record a 10 minutes video clip immediately. This operation can be stopped by clicking **[Quick Stop].**
Recording Time: Enter the recording start and end time.
[Start Recording]: Start recording a video clip based on the time slot as set. Clear Videos: Clear all recorded videos in this sensor.

⑥ **Download Address:** all recorded videos can be downloaded or removed by clicking corresponding buttons as shown below.

Video clips can also be uploaded to your specified file server. Set the File Server parameters in the following page by clicking the button **[File Server Setting]** before you upload video clips.



Passenger Flow Statistics



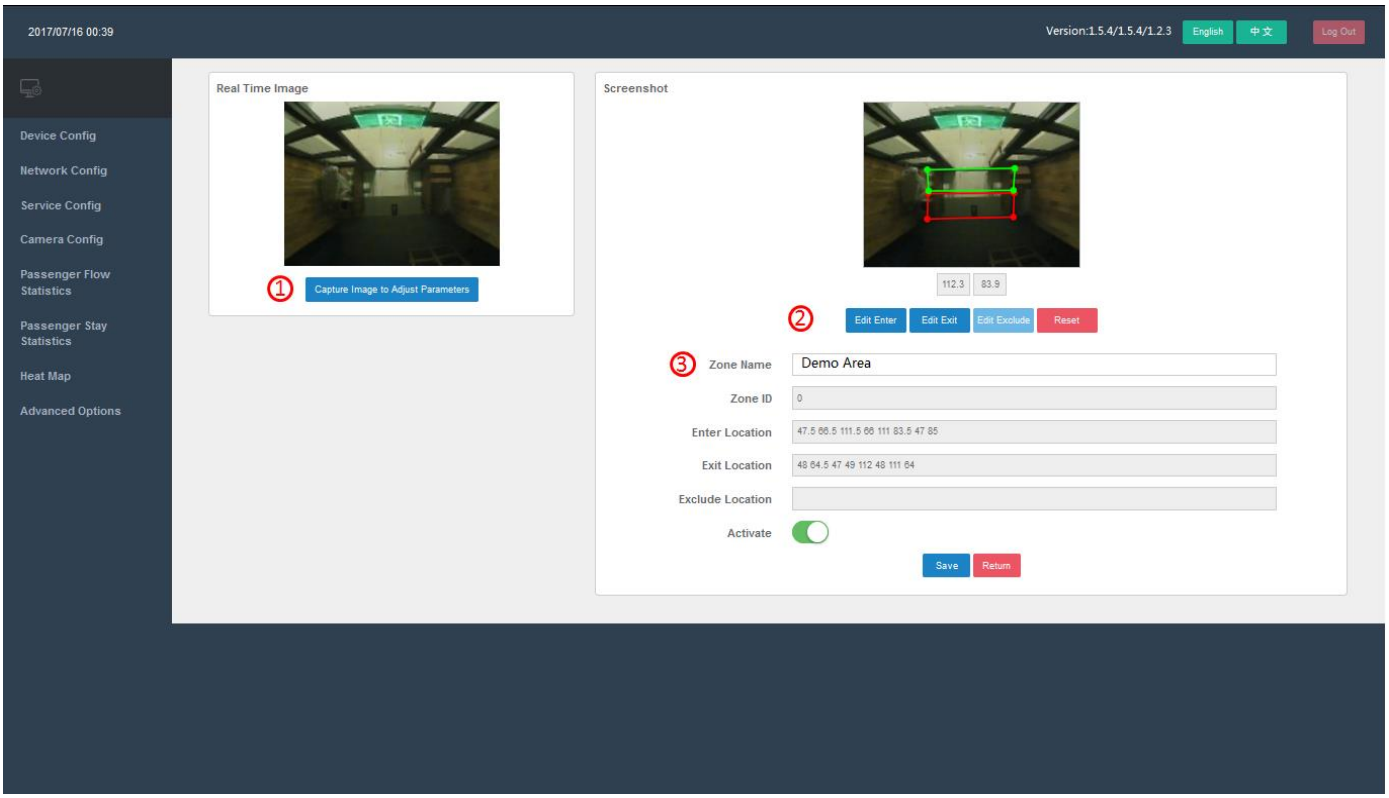
① 8 zones can be enabled for counting in and out traffic flow. **Enter** / **Exit Numbers** represent real time statistics of passengers flowing in and out. **Active State** shows whether a zone is active or not.

[Modify]: Click the button into **Count Setting page.**

[Reset]: Rest count number to 0.

② Management for Abnormal Passenger Flow Warning is used for operators to manage cheating behavior, in which the device sends warning messages and save an image of the passenger flow deemed as abnormal. The saved image can be downloaded for analysis and used as proof of evidence when necessary.

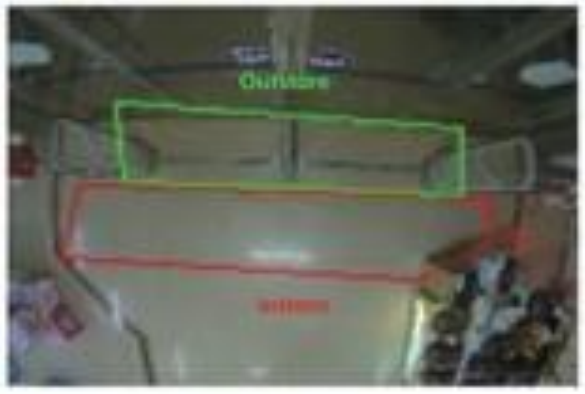
Count Setting



① **[Capture Image to Adjust Parameters]:** Click the button, the most recent screenshot of real-time monitoring images will display on the right side for adjusting parameters.

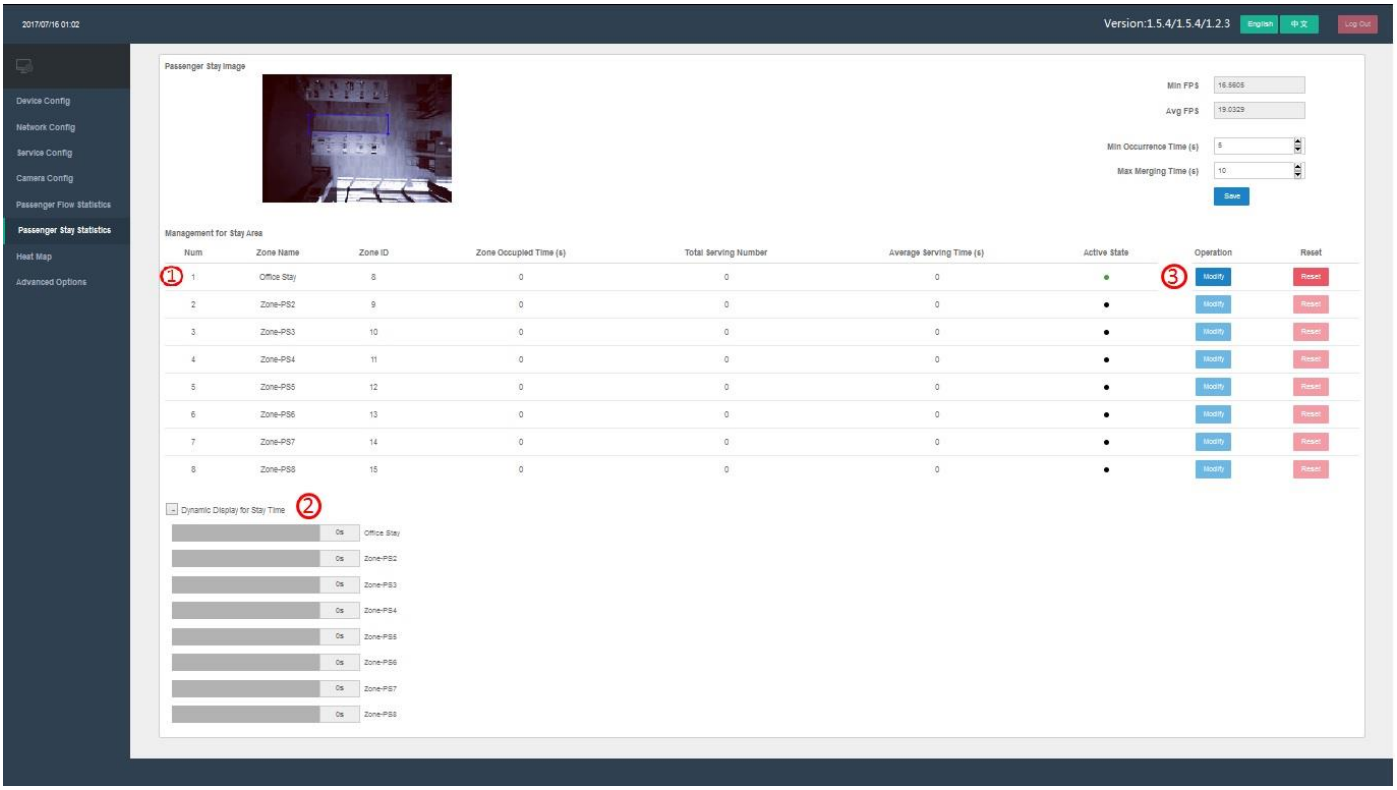
② The sensor counts traffic in when people move from the Exit area into the Enter area and counts traffic out when they move from the Enter area into the Exit area. The Enter area is close to store interior and the Exit area is close to store exterior. They are represented by drawing red line frame and green line frame respectively and shall not overlap with each other for accurate counting.

[Edit Enter]: Draw the red line framed Enter area by single-clicking points on the screenshot and double-clicking the final point so that all points are connected with lines to construct an automatic closed frame.
[Edit Exit]: Draw the green line framed Exit area by single-clicking points on the screenshot and double-clicking the final point so that all points are connected with lines to construct an automatic closed frame.
[Edit Exclude]: Unavailable in this version. Exclusion lines are used to assist in discarding employee tracks or other activity that occurs in areas in which you do not wish to count.
[Reset]: Clear all settings in this page.



③ **Area Name:** User-configurable text string to identify the zone within the TD1001 web interface
Activate: Start/Stop the function of this zone.

Passenger Stay Statistics

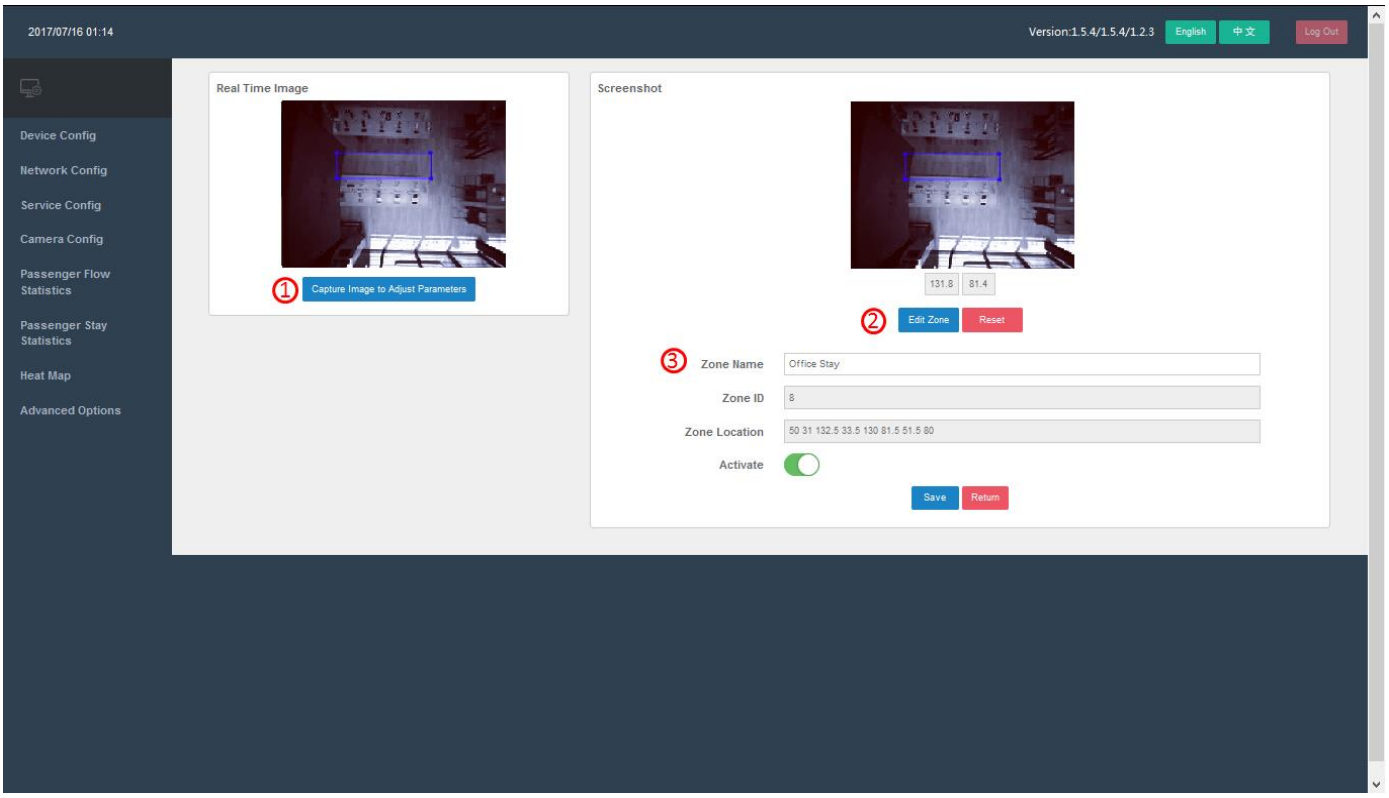


① 8 zones can be activated for counting traffic in the zones and presenting stay time.
Total Serving Number: Total number of clients served in a specific service area.
Average Serving Time: Average time served per client in a specific service area.

② **Dynamic Display for Stay Time:** Display clients' stay time in each activated zone in real time.

③ **[Modify]:** Click the button into **Zone Setting** page.

Zone Setting



① **[Capture Image to Adjust Parameter]:** Click the button, the most recent screenshot of real-time monitoring images will display on the right side for setting parameters of a zone.

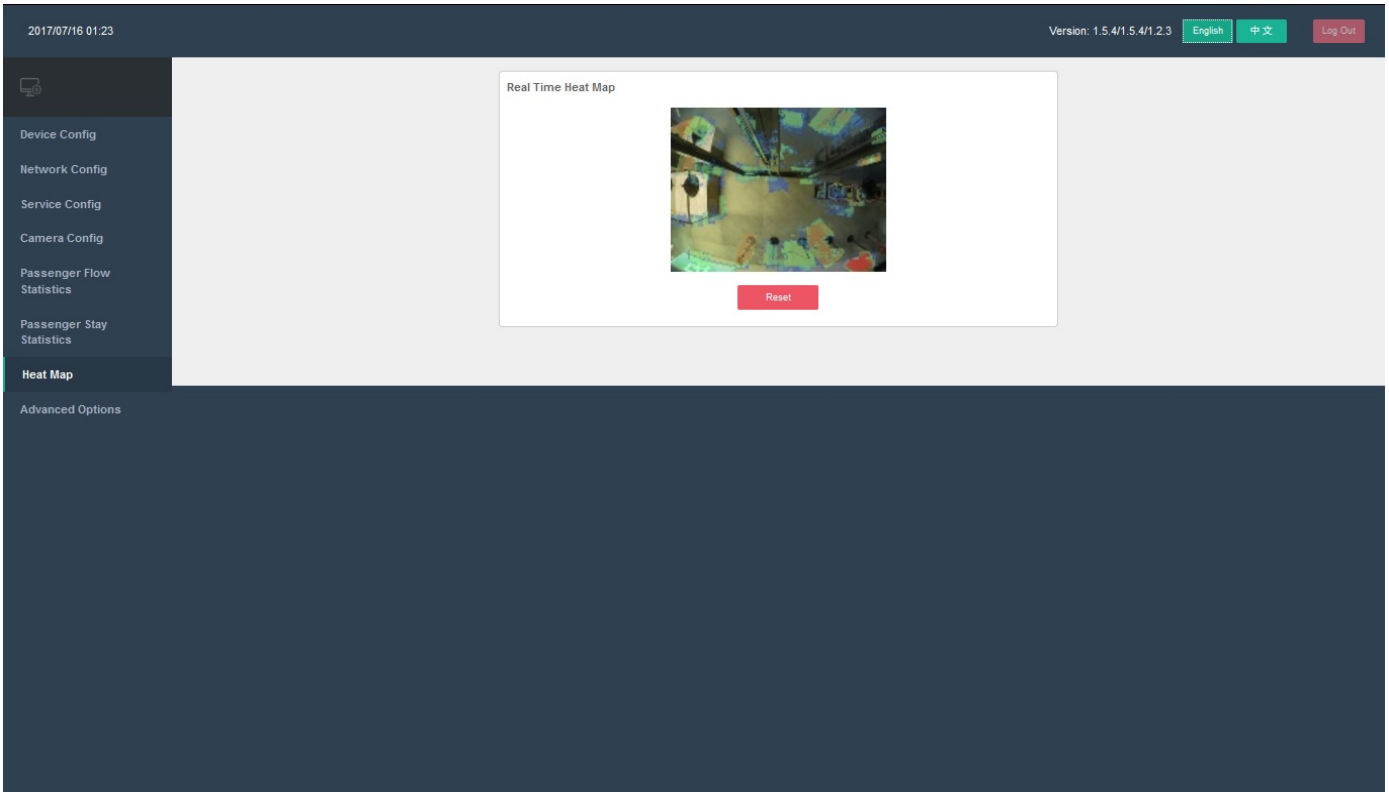
② **[Edit Zone]:** Draw the blue line framed service area by single-clicking points on the screenshot and double-clicking the final point so that all points are connected with lines to construct an automatic closed frame.
[Reset]: Clear all settings in this page.

③ **Zone Name:** User-configurable text string to identify the zone within the web interface
Activate: Start/Stop the function of this zone.

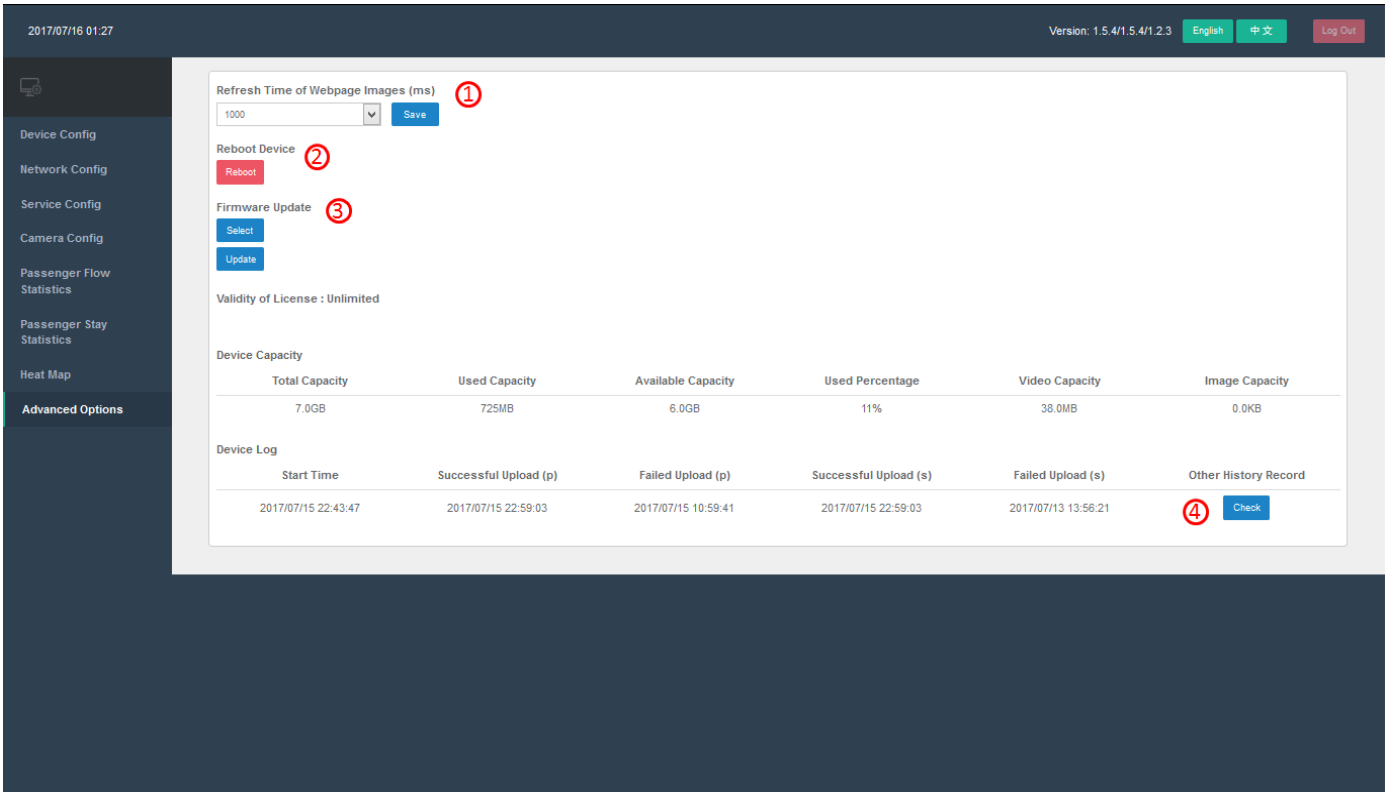
After a zone is set and activated, the sensor will count the number of people served when they move into the zone and counts the time people stay.

Heat Map

Heat Map is a vivid way to demonstrate traffic density by using a color-coded heat map of all tracks. Red represents high density of traffic flow while blue represents low traffic volume.



Advanced Options



① **Refresh Time of Webpage Images:** Set the interval for updating webpage images.

② **Reboot Device:** Click the button **[Reboot]** to reboot the sensor.

③ **Firmware Update:** Update the firmware on sensor

- Click **[Select]**
- Choose firmware file
- Click **[Update]**
- Wait for 60 seconds until the sensor reboots automatically after upgrading

④ **Other History Record:** Click **[Check]** to see other relevant logs for technician troubleshooting.

TD1001 Signal Lights Indicators

The TD1001 Smart Counting Sensor can be diagnosed by observing its signal lights after being installed and configured through the web interface.
There are three signal lights on the device. The signal light in the middle indicates different status of device with three colors: red, orange and green.

Color of Signal Lights	Indicators
Constant red	Device error, hardware problem
Flashing orange	Connectivity issue, unable to connect with the server
Flashing green	Functioning properly

Other Settings

The TD1001 Smart Counting Sensor can be reset by pressing the **[Reset]** button located in the reverse side of device.

[Reset]: Use the end of a paper clip, pin or SIM eject tool to press the button no less than 10 seconds and then release, the device will be reset to factory default settings and reboot automatically. Make sure the device is powered on when you reset it.