

SETUP GUIDE

DUSTTRAK AEROSOL MONITOR

MOBILE APP

FOR USE WITH ENVIRONMENTAL DUSTTRAK™ AND DUSTTRAK™ AEROSOL MONITOR
MODELS 8530(EP), 8533(EP), 8540, 8543, 8540-M, 8542-M, 8543-M

P/N 6010779, REVISION B
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Downloading the App onto a Mobile Device

1. Access Google Play™ or Apple Store®.
2. Search for DustTrak Mobile using the app search engine.
3. Download and install the app.

Configure Ethernet IP Address for Environmental DustTrak Aerosol Monitor

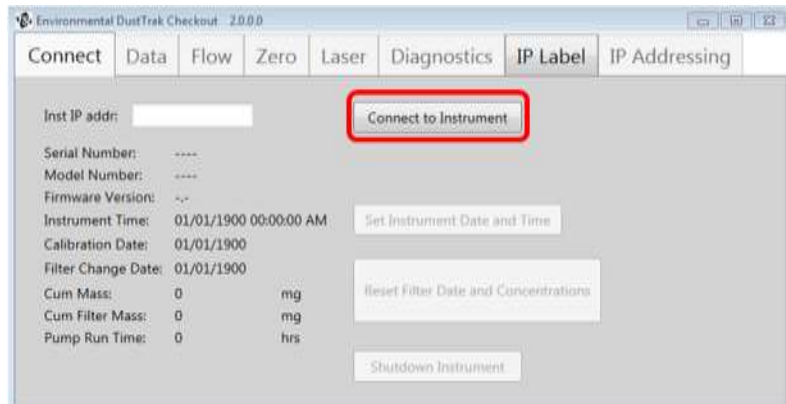
1. Start Environment DustTrak Checkout Software.

NOTES

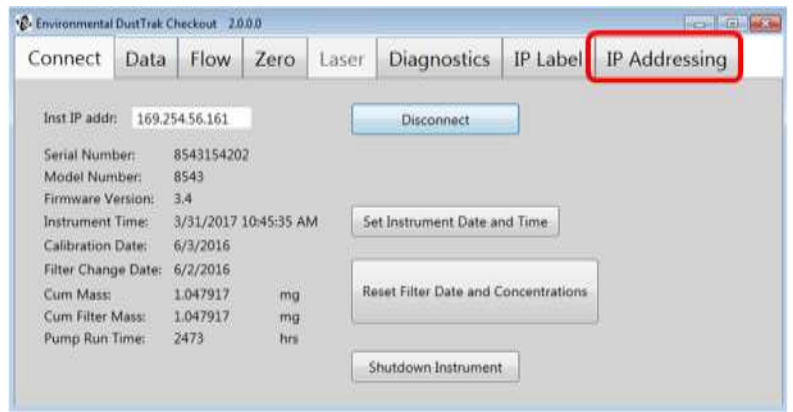
This software can be downloaded from the TSI website:

- Navigate to the Environmental DustTrak Aerosol Monitor Product page.
- Under “**Additional Product Information**” click on **Software**.
- The software can also be found using the TSI Software and Firmware Wizard. Search for **Env** or by entering the model number.

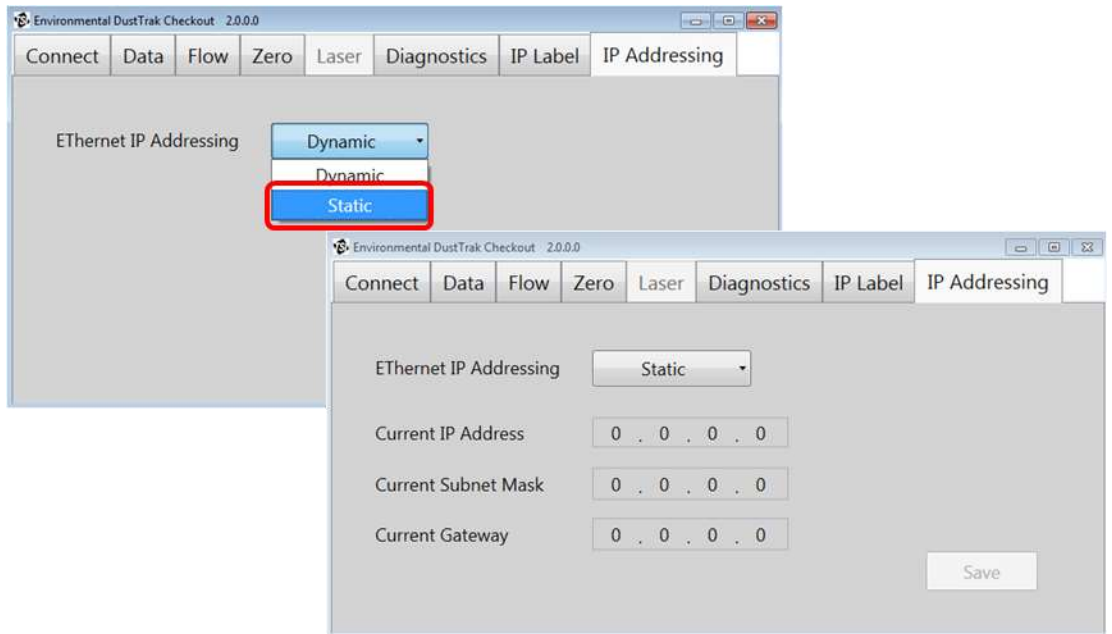
2. Power the instrument.
3. Connect the instrument to a computer with the provided USB cable.
4. Click **Connect to Instrument** to communicate with the instrument using the Checkout Software.



5. Click on the **IP Addressing** tab.



6. Select **Static** from the pull-down menu.



7. Enter **192.168.8.186** for the IP Address.

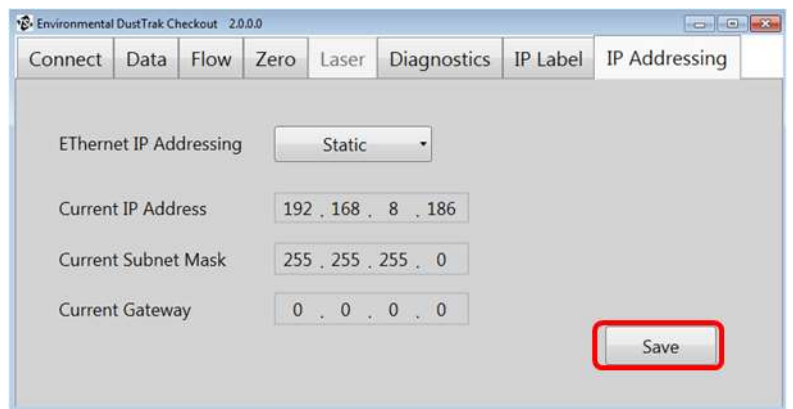
8. Enter **255.255.255.0** for the Subnet Mask.

9. Click **Save**.

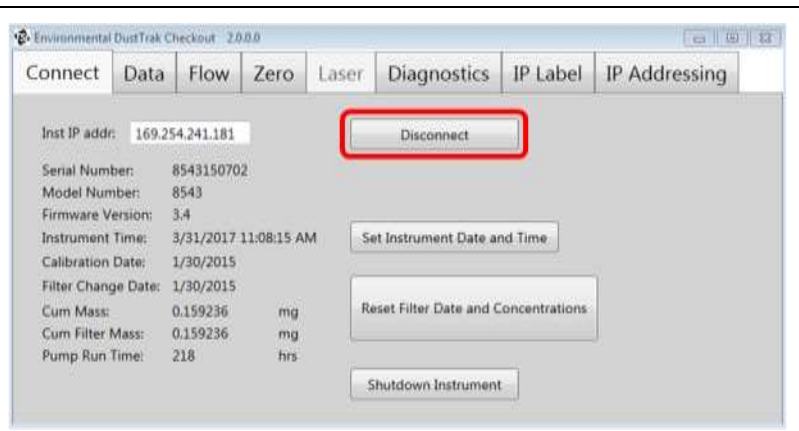
NOTES

IP address on the back label is the instrument USB IP Address and is not used for the wireless communication method.

Gateway does not need to be configured, all digits can remain 0.



10. Click on the **Connect** tab and click **Disconnect**.
11. Power the instrument off.
12. Power the instrument on.
13. Leave power on for two minutes for the IP Address changes to take effect.
14. Power the instrument off.

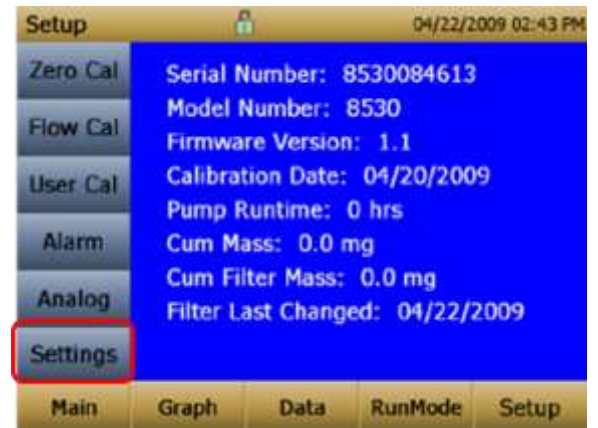


Configure Ethernet IP Address for DustTrak Monitor

1. Power the instrument.
2. Touch **Setup** tab in the lower-right corner of the screen.

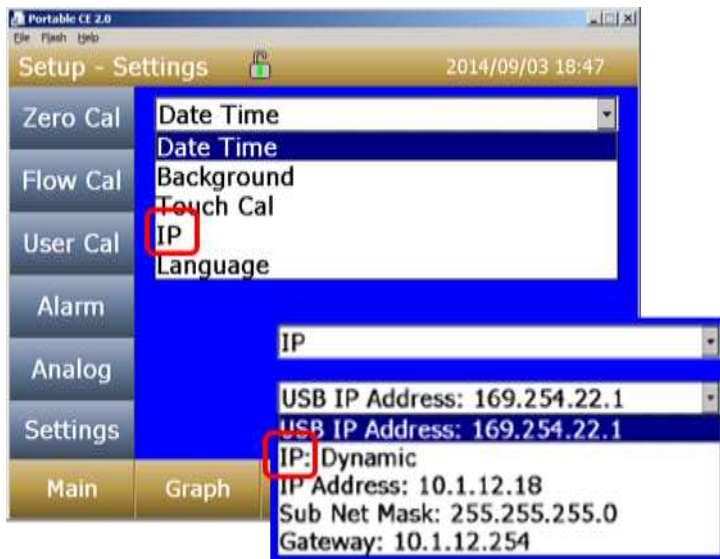


3. Touch **Settings** in lower-left corner of the screen.



- From the pull-down menu select **IP**.
- Select **IP**: under the USB IP Address.

You should now have the option to select either Static or Dynamic.



- Select **Static** and click **Save**.

NOTE

New DustTrak instruments are set to Dynamic

- Select **IP address** and enter **192.168.8.186**, click **Save**.

NOTE

DO NOT change the USB IP Address.

- Select **Subnet Mask** and enter **255.255.255.0**, click **Save**.
- Select **Gateway** and enter **0.0.0.0**, click save
- Return to main screen.
- Turn off instrument.

NOTE

Power must be cycled before settings will take effect allowing for communication with the app.

Please reference the DustTrak 8530(EP) and 8533(EP) manual for additional information regarding setting the Ethernet IP address (see *Chapter 3: Settings*).

Configure the Wireless Router

1. Connect the 1 dB hinged antenna to the router.
2. Connect the router to your computer using the USB cable.
 - a. Completing this step will provide power to the router.
 - b. It is not a means of communication.
3. Connect to the router wirelessly.
 - a. This can be done using a computer or mobile device.
 - b. Wireless network for the router will contain GL-AR150 in the SSID.



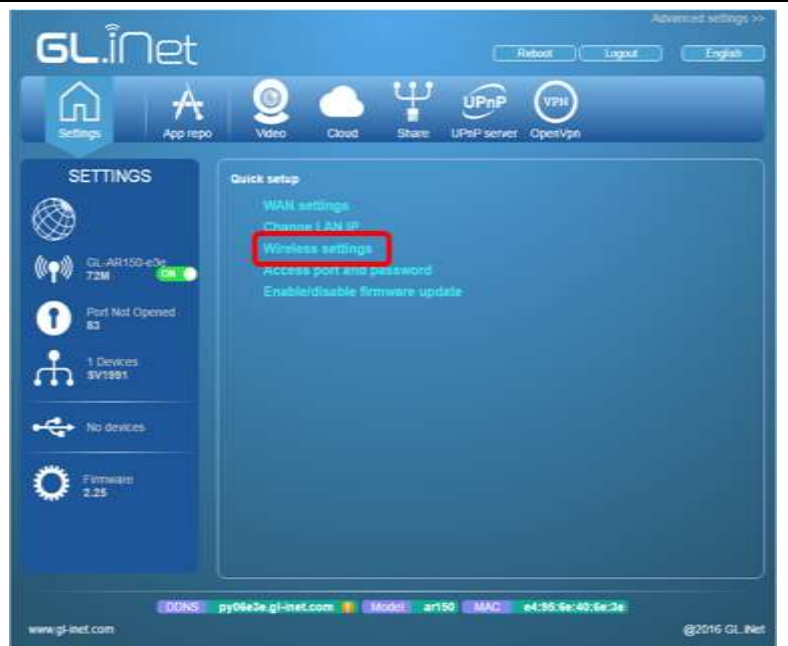
1. Using an internet browser (e.g., Google Chrome™) type the router IP address into URL.
 - a. The router IP address can be found on the bottom label (IP 192.168.8.1).
 - b. You will be taken to GL.iNet allowing you to access the router settings.
 - c. The first time you access the router you may need to set up a language, your time zone and new access password.
 - d. The new access password is used for logging into the GL.iNet application and is different than the wireless router password, but can be the same for clarity.



2. Create a password and click **Finish**.



3. Click on **Wireless settings** in Quick setup menu.

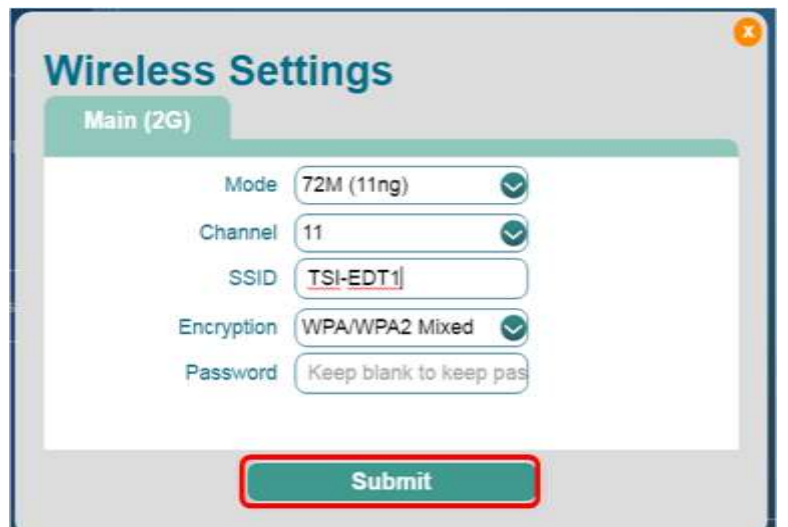


4. Change the SSID to TSI-XXXXXX.
- a. The SSID must start with **TSI-**, but can have additional characters after it if preferred.

NOTE

TSI must be capitalized.

- b. You can also change the wireless password to access the router, also indicated by “Key” on the bottom label of physical router.



5. Click **Submit**.
- a. After clicking **Submit** it is normal to lose your network connection because the SSID has been changed.
- b. You may get a notification from your browser asking to reconnect your network.
- c. Click **OK**.
- d. You are now ready to connect to the instrument using your mobile device.



6. If you would like to change any other router settings after changing the router SSID, you will need to re-establish a wireless connection with the router.



Connect to the Instrument Wirelessly using a Mobile Device

NOTE

To ensure proper communication with DustTrak instruments, Wireless router installation procedures **need** to be completed prior to starting this procedure.

1. If not already on, turn on your DustTrak instrument.
2. Allow two (2) minutes to pass to confirm the router has had time to start up and communicate with the instrument.
3. Access wireless Settings on the mobile device.
4. Select the specific router you would like to communicate with from the available wireless networks on your mobile device. Look for the wireless SSID that was configured in the previous steps.
5. Navigate to the DustTrak Mobile app on your mobile device.
6. **Open/Start** the DustTrak Mobile app on your mobile device.
7. Click the green connect button in the app.
8. Default main screen is "**Mass View**."

Items displayed in the **Mass View** screen:

- Device Serial Number
- STEL, System, Laser and Flow status
 - Green – No errors or STEL limit has not been reached
 - Red – Function has an error or STEL limit has been exceeded
- Mass Concentration Total updated every second if the instrument is sampling
- For DRX models PM1, PM2.5, PM4, PM10 size fraction mass concentrations
 - Touching one of the size fractions will replace Mass Concentration Total
- Time Remaining in Test – hr:mm:sec

Using the App

1. Touch the 3 bar icon to access the app menu.
2. Touch **Start/Stop** to start and stop the instrument.
3. Touch **Setup** for additional instrument information.
 - a. Serial Number
 - b. Model Number
 - c. Firmware Version
 - d. Calibration Date
 - e. Filter Last Changed
4. Touch **Graph** to view the last two minutes of live data updated every second.
 - a. For DRX models all five (5) mass channels are graphed simultaneously.
 - b. Touch PM1, PM2.5, PM4, PM10 or Mass Concentration Total to view or not view that size channel on the graph.
5. Touch **Download Data** to download all logged files from the instruments internal memory.
 - a. If the instrument is logging, the app will need to stop the instrument before the data can be downloaded. Be sure you want to do this, because you will not be able to resume the log. A new log will need to be started.
 - b. App will state the data is being retrieved and will show percentage to completion.
 - c. Data is downloaded to the mobile devices hard drive.
6. Touch **Review Data** to review downloaded data.
 - a. From the pull-down menu select the log file you would like to view.
 - b. Touch **Graph Data** to view a graph of the log file.
 - c. Touch **Show Test Data** to go back to tabulated format.
 - d. Reviewing data can be done even if you are not connected to an instrument.
7. Touch **Send Data** to e-mail downloaded log files.
 - a. Disconnect from the instruments wireless router and reconnect to cellular network.
 - b. Enter an e-mail address and touch **Submit**.
 - c. Choose an e-mail app and send using your normal process for sending e-mails.
 - d. All log files will automatically be attached to the e-mail (CSV file format).
 - e. Sending data can be done even if you are not connected to an instrument.
8. Touch **Clear Downloaded Data** to remove all log files from the mobile device's hard drive.
 - a. Clearing Phone Data can be done even if you are not connected to an instrument.
9. Touch **Delete EDT Data** to remove all log files from the instrument.
10. Touch **Disconnect** to disconnect from the wireless router.

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