



OmniTrak™ Solution + Report Creator

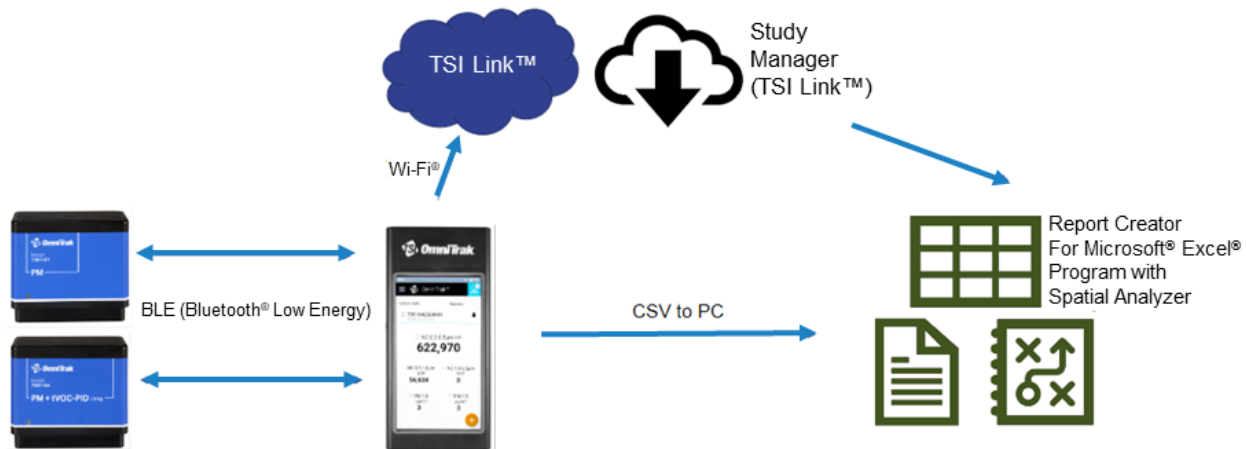
User's Guide

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Overview

This document is a guide to get started with the OmniTrak™ Solution + Report Creator. More information can be found on the [OmniTrak Solution | TSI](#) page.



Setup and Subscription

Account Setup

Registering on [TSI.com/Register](https://www.tsi.com/register). This website has a full guide and video instructions.

TSI Link™ Report Creator Subscription

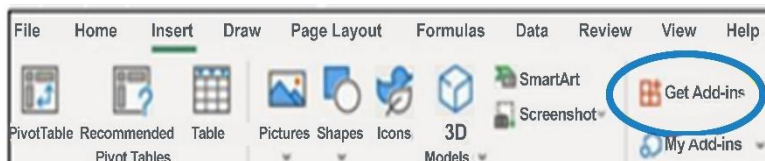
The Subscription typically autoactivates, but if the users account is on a different account versus what was used to order and ship the device, then follow the steps in [TSI Link Report Creator Setup Guide](#)” using an Activation Code.

Report Creator Software Set Up

1. Install TSI Link™ Report Creator Add-in from within Microsoft® Excel® program.



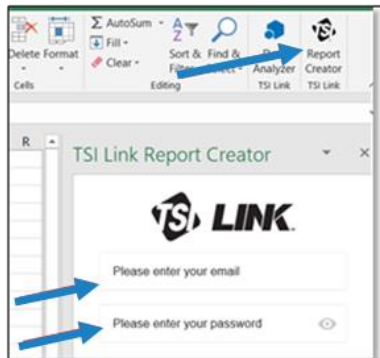
2. Go to Microsoft® Store for Excel® Add-ins. Under “Insert” tab, “Get Add-ins” section, choose **My Add-ins**, and then click **Store**. Search for TSI and click “**Add**” for the TSI Link™ Report Creator.



- Once the Add-in is installed, a **TSI® Link™ Report Creator** icon will appear in the upper-right of the Home tab in Microsoft® Excel® program.



- Click the icon to open the Add-in; then enter your TSI® Link email address and password.



For Detailed Steps see [TSI Link Report Creator - Complete Setup Guide](#).

Powering Smart Station and Modules

Charging

An ideal power source for the Smart Station and Modules is a 5 VDC, 2 Amp, 10 Watt wall charger using the provided USB cable. They can both be charged in either on or off states. On the Modules, there are LEDs next to the charging port indicating Module status – see table below.



Smart Station Power

- To turn the Smart Station **on**, hold the power button on the right side for 2–3 seconds.
- To turn the Smart Station **off**, hold the power button on the right side for 2–3 seconds and touch **Power Off** in the upper-left corner of the screen.

Module Power

- To **power on**, hold the power button located on the left side for ~1 second.
- To **power off**, hold the power button for ~5 seconds. See table below for LED signals.



Sensor Signals

Signal	Meaning
LED on Outside of Module	
Blink Blue 1x/sec	Bootloader running
Solid Red	Instrument error
Blink Blue 2x/sec	Waiting for BLE connection
Blink Green 1x/5 sec	BLE connected, battery >25% SOC
Blink Yellow 1x/5 sec	BLE connected, battery 10–25% SOC
Blink Red 1x/5 sec	BLE connected, battery <10% SOC
Blink Green->Yellow->Red->Off	When powering off Sensor Node
LED on Bottom of Module	
Orange with Flashing Green	Module charging
Orange with Solid Green	Module fully charged
Off	Charger not connected

NOTICES

- All Modules are shipped in “Sleep Mode” to protect the battery during shipment and storage. It will not be possible to power on the Module using the side button until Sleep Mode is disabled. To disable, plug the module into a power source and charge it for a few minutes. This process is only required the first time the Module is powered on.
- The Smart Station can enter Hibernation Mode by pressing the power button once. Press one more time to exit hibernation mode.
- The button on the left side of the Smart Station is disabled. Be sure you are using the power button on the right side of the Smart Station.

Connecting Smart Station to Modules

Wi-Fi®

To connect the Smart Station to Wi-Fi®:

- Tap the horizontal line icon in the upper-left corner of the display.
- Tap **Settings**.
- Tap **Wi-Fi**.
- Move the slider over to turn on the Wi-Fi® (by default it is off).
- Select a Wi-Fi® network and enter the password.
- Tap **Connect**.

Date and Time

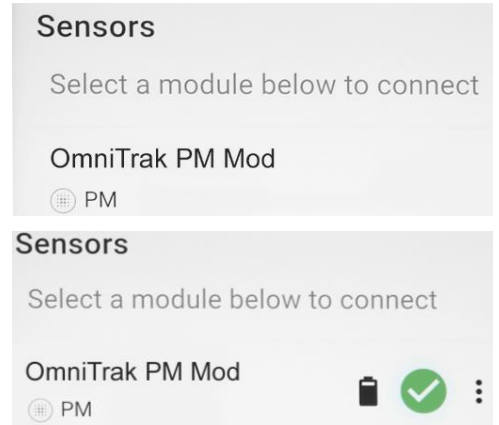
To adjust the Smart Station date and time:

- Tap the horizontal line icon (hamburger) in the upper-left corner.
- Tap **Date & Time**.
- Tap **Use network-provided time** and then touch **Off**. You can now adjust the date and time.

Pairing Modules to Smart Station

To **pair**, ensure that both the Smart Station and the Module are powered on and are close to each other [< 2 m (6 ft)].

- Tap the Blue Mesh icon (similar to computer network icon) in the upper-right corner. The Smart Station will display a list of all Modules within the BLE (Bluetooth® Low Energy) range.
- Tap the Module to connect.
- If the app states “**No sensor modules detected,**” tap **REFRESH**.
- To confirm successful connection:
 - A green check mark and battery icon will appear next to the Module name.
 - LED on the front of the Module will blink green.
- Repeat the above steps to connect additional Modules to the Smart Station.
- Tap **DONE** when finished.



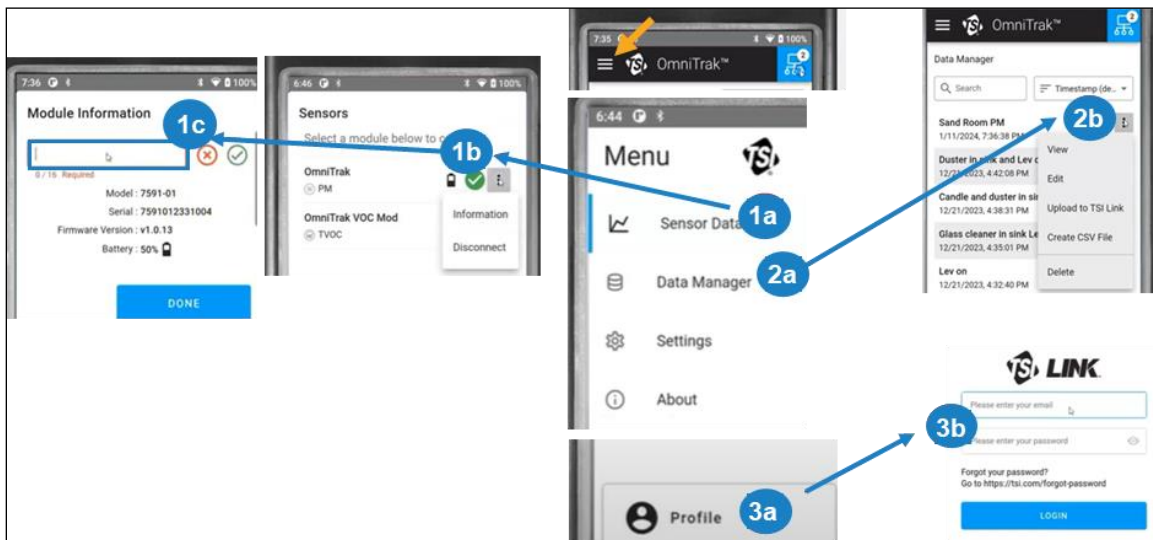
To **unpair** Modules from the Smart Station:

- Tap the kebab menu icon (three vertical dots) next to the green check mark.
- Tap **Disconnect**.
- A confirmation at the bottom of the screen will appear. Tap **Disconnect** to finalize.

NOTICES

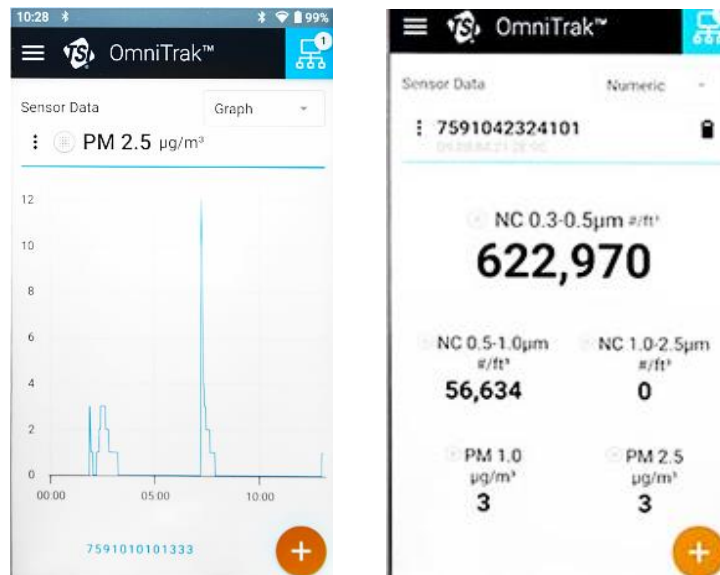
- It is not possible to connect the same Module to two or more Smart Stations at the same time.
- If a Module is out of BLE (Bluetooth® Low Energy) range for ~15 minutes, it will power itself off to save the battery.

Smart Station Menu



From the hamburger menu button (upper-left corner), you can access the main OmniTrak™ functions:

1. **1a) SENSOR DATA – 1b)** Managing sensors, including **1c)** adjusting the Sensor Name (Module serial number by default). Real-time measurement data can be viewed here in numerical or graphical views.



2. **2a) DATA MANAGER – 2b)** Managing Study Data including viewing, editing, uploading and creating local CSV files on your computer.
3. **3a) PROFILE – 3b)** Logging into TSI Link™ which enables uploading of studies for easy management (noted above).

NOTICES

- By default, the date and time are used as the study name. Change the name if desired and add location and notes information.
- The logging interval is every 1 second.
- Only a graphical view of the historical data is possible.

Data and Recording Studies

Recording Studies

To record a Study:

- Tap the orange + icon in the lower-right corner of the screen.
- Tap **Generic Study**.
- Tap the green circle to start the Study. The green circle should change to a red circle indicating the device is logging measurement data.
- When you are finished with your Study, tap the red circle to stop.
- Confirm that you would like to stop recording data by tapping **Stop**.
- Tap **Save** to save the study.

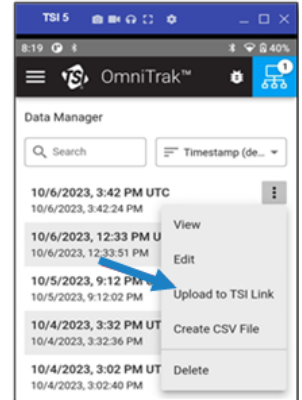
Exporting Data

You can export data either through 1) Study Manager to the TSI Link™ cloud (1) or you can create a CSV file and export it to a PC (2).

1. Export via Study Manager to TSI Link™ Cloud.

The easiest way to export data is via the STUDY MANAGER.

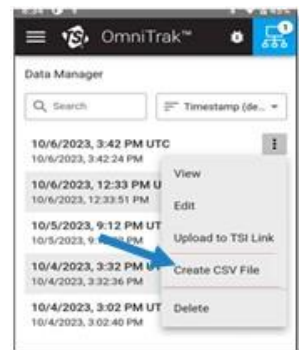
- Tap the hamburger menu icon (three horizontal lines) in the upper-left corner of the display
- Tap **Data Manager**. You should see a list of recorded Studies.
- Tap the kebab icon (vertical three dots) next to the Study you want to export.
- Tap **Upload to TSI Link**.



2. Export via CSV File to PC.

To manually export the file:

- Tap the hamburger menu icon (three horizontal lines) in the upper-left corner of the display.
- Tap **Data Manager**.
- Tap the kebab icon (vertical three dots) next to the Study you want to export.
- Tap **Create CSV File**. A message will appear stating the file was saved in a folder titled **Documents/TSI OmniTrak**. This folder is contained within the Smart Stations on-board memory.
- Tap **Save** to complete the process. The Smart Station will notify you when the files are ready.
- Connect the Smart Station to your PC using the provided USB cable. A windows folder should open.
- Double click on **Internal Shared Folder**.
- Double click on the **Documents** folder.
- Double click on the **TSI OmniTrak** folder.



NOTICES

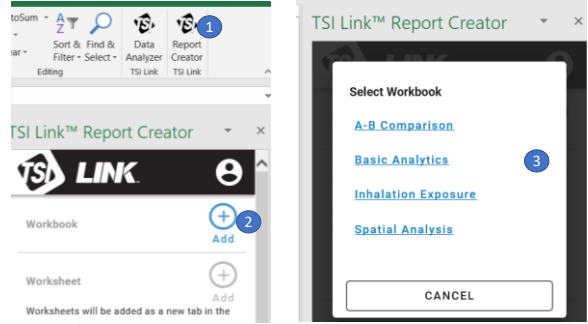
- Deleting the CSV file will not delete the study that is saved in the OmniTrak™ application.
- If the study contains data from multiple Modules, the export features will separate the data and generate CSV files for each individual Module.

Analyzing and Reporting on Studies using Report Creator

To start a new Report:

1. In Microsoft® Excel® program, click on the **Report Creator icon**.
2. Click on the **+** icon to Add a new workbook.
3. Click on the type of workbook you would like to create.

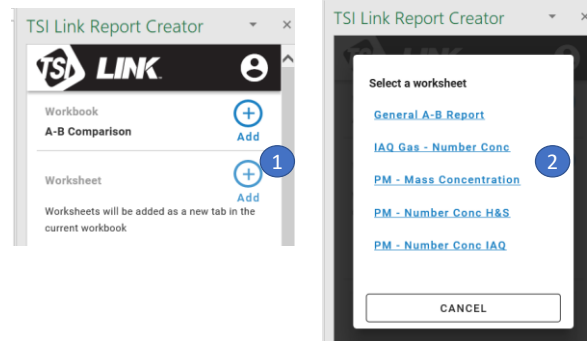
Fill out and edit the cover sheet information. Customize it for your company.



Adding Worksheets

Select the Worksheet you are interested in.

1. Use the **ADD** button.
2. Click on the desired worksheet.



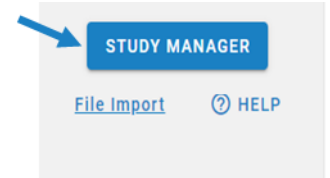
Parameters

Some reports require you to identify parameters before you can import data. If this is the case, cells will be highlighted red at the top of the worksheet and you will need to select from the drop-down menus before moving forward. If there are not any cells highlighted red for the report you selected, you can go right to loading data.

Parameters	None	None	None
Location	PM 1.0 (ug/m3)		
Conditions	PM 2.5 (ug/m3)		
Date:	PM RESP (ug/m3)		
Comments:	PM 10 (ug/m3)		
	PM Total (ug/m3)		
	PM 1.0 (mg/m3)		
	PM 2.5 (mg/m3)		

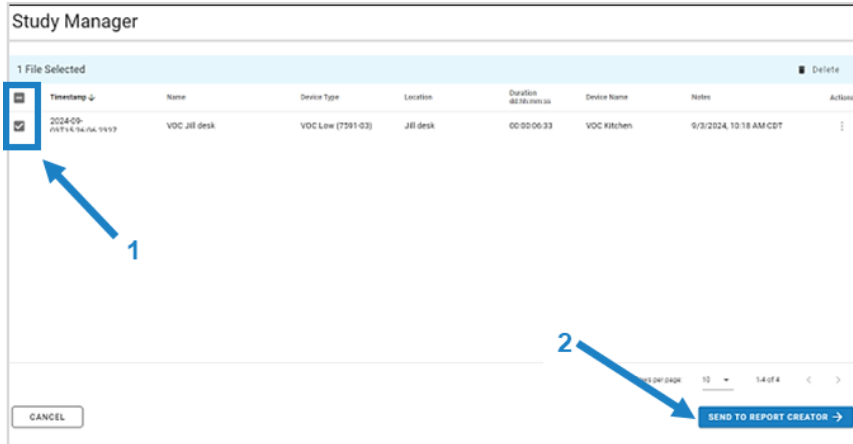
Loading Data

How you import the data depends on how you exported it from the Smart Station: 1) If you exported using the Study Manager to TSI Link™ then you will import the study from TSI Link. 2) If you created a CSV file and transferred it to a PC, then you will import the study from that PC.



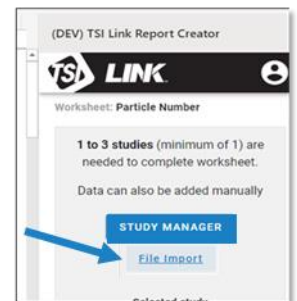
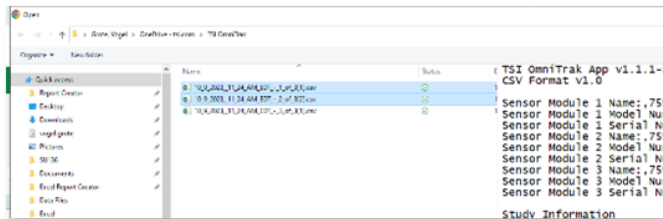
1. Import from TSI Link™.

- In the Microsoft® Excel® TSI Link™ Add-on, click on **STUDY MANAGER**.
- Select the file(s) for the report.
- Click **Send to Report Creator**.
- After they load, click on the **Study Manager**.



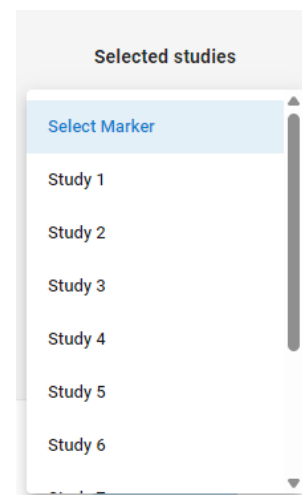
2. Import a CSV file from PC.

- In the Microsoft® Excel® TSI Link™ Add-on, click **File Import**. This will open a new window.
- Navigate to your saved CSV file. A single study or multiple studies can be selected.



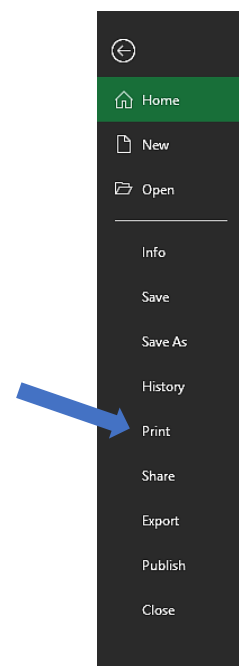
Marking

If you have selected more than 1 study to add to the worksheet, Report Creator will ask you to match the data being imported with the matching label in the worksheet. Once all the studies are marked, use the **ADD DATA** button to pull them into the Report Creator.



Report

Click **File** in Microsoft® Excel® program and then **Print** to preview the report.



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TSI Incorporated – Visit our website www.tsi.com for more information.

USA Tel: +1 800 680 1220
UK Tel: +44 149 4 459200
France Tel: +33 1 41 19 21 99
Germany Tel: +49 241 523030

India Tel: +91 80 67877200
China Tel: +86 10 8219 7688
Singapore Tel: +65 6595 6388

