

Using the T&D Thermo App with TR-7wf Data Loggers



T&D Thermo

The T&D Thermo App from T&D Corporation can be used to accomplish a variety of functions with the TR-7wf Series of Wi-Fi enabled wireless Data Loggers. This convenient App is available for free download from Apple's App Store for iOS devices, or from Google Play for Android devices, and can be used on both Smart Phones and Tablets. Once installed, the App can be used to set up a TR-7wf logger, make device settings for the logger itself, configure T&D's free WebStorage Service, download recorded data for viewing, local archiving and sharing with colleagues. Using the T&D Thermo App, it is entirely possible to utilize most functions of a TR-7wf Data Logger with T&D's WebStorage Service without a PC.

I) Set up a WebStorage Service Account

Some of the TR-7wf's most useful features, such as automatic data uploading or warning notifications, require integration with T&D's free WebStorage Service. Although you can use the TR-7wf as a simple USB Connected logger, the device relies on connection to the WebStorage Service for its complete functionality.

1. Using your browser go to www.webstorage-service.com . This can be a browser on your Smart Phone or Tablet, or on a PC if you prefer.
2. Click on Get a User ID.
3. Enter an Email Address and a Password.
4. Your User ID will be sent to this Email address. Note that this is also the email address to which warning notifications will be sent, if enabled, so choose it accordingly.

II) Register a TR-7wf Logger to your WebStorage Service Account

Tr-7wf Data Loggers can be registered to a WebStorage Service Account in two different ways. The first is through a common Web Browser such as the one that was used to set up your WebStorage Service Account.

1. After receiving the User ID, use it and the Password you selected to log in to your account.
2. Toward the top of the page click on Account.
3. Next Click on the link to Add / Remove Devices. This will take you to the Account Management page.
4. There is a label with a Serial Number and Registration Code included in the box with the TR-7wf (attach this label to the back of the unit). Enter these and click on the Add button to register the TR-7wf to your account. You will then see the unit added to the Registered Device List just under the Add button.
5. At this time you may also want to go to the Settings page to set various parameters for your account.

LoginID: **tdgb7644**


TOP

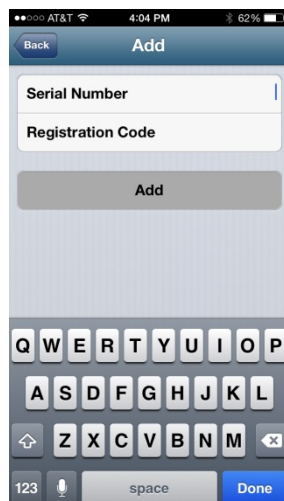
Settings

Account

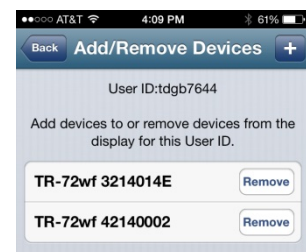
Important Note: While you have now added the TR-7wf to your account, it will not appear on the Top page until after the first successful data transfer from the unit has been made.

Alternatively, you can use the T&D Thermo App on your Smart Phone or Tablet to register a TR-7wf logger to your account.

1. From the Home Screen in the T&D Thermo App tap the Tools Icon. 




2. This will bring up the Settings Screen.
3. Tap T&D WebStorage Service and enter the User ID that was assigned to your account and your Password, then tap Log-in.
4. Next tap Add/Remove Devices. This will bring up the Add/Remove Devices screen.
5. Tap the + Icon in the upper right corner.
6. Enter the Serial Number and Registration code from the label that is packed in the box with your unit.
7. Tap Add
8. Your TR-7wf should now appear in the list of devices for your account.



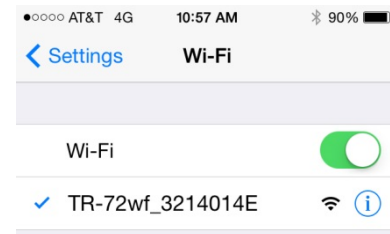
II) Connecting to a Wireless LAN


Note: If your Wireless Router has a WPS function it is possible to use this to connect a TR-7wf logger to your LAN without using the T&D Thermo App. Instructions for using this method of connection can be found in the Introductory Manual packed in the box with your logger.

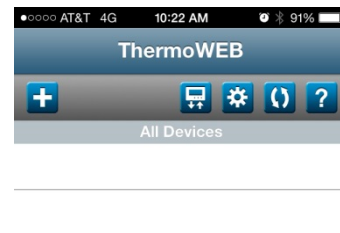
1. In order to use the T&D Thermo App with a logger it is first necessary to activate the devices Access Point Mode. This is done by simultaneously pressing the Display and Interval  buttons. The AP Icon will start to blink rapidly. After about two seconds it will stay on solid. The unit is now in AP mode and ready for direct log on from a smart device.



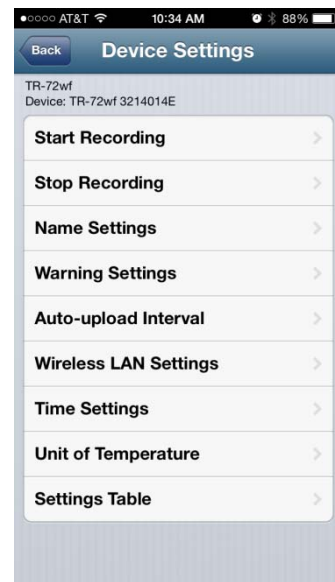
2. Next go to Settings > Wi-Fi on your Smart Phone or Tablet. Select the TR-7wf from the list of available networks to log directly onto the unit. Once the connection is established it will then be possible to use the T&D Thermo App to access the logger.



3. Open the App on your smart device and tap the Device Icon.  This will open the Direct Wireless Communication screen.




4. In the Direct Wireless Communication screen tap Device Settings.



5. From the Device Settings screen you can set most all of the Data Logger parameters for Recording Start and Stop, the Units of Display, the Time in your area and so on. We will return to this screen a little later as you will want to make all of these settings. For normal now, however, we want the device to connect to a local Wireless LAN, so tap Wireless LAN Settings.



6. From the Wireless LAN Settings screen you can configure the TR-7wf to log on to up to three different connection points or networks. To start tap Setting 1.

7. In the Wireless LAN Setting screen enter the SSID for the first network that you would like to connect to. Set the Security Mode and Password, and most of the time you will want to enable DHCP, unless your network requires a fixed IP address. Tap Setting to send the Wireless LAN log on information to the logger. You should see a Setting Completed notification. Tap Back four times to disconnect the App from the logger. The logger will exit the AP mode and now attempt to log onto the Wireless LAN. You will see the Wireless Icon  blink a few times while connection with the Wireless LAN is established. When connection is established the icon will stop blinking and remain on. If you do not see this, log back on to the logger from the App and double check the Security Mode and Password to make sure they are compatible with your Wireless LAN router. The WEB Icon **Web** may continue to blink. This is because a connection to T&D's WebStorage Service hasn't been established yet. Do not worry about this for now.



Important Note: The TR-7wf does not support Enterprise Mode W-Fi Security.

III) Making Device Settings for the TR-7wf Logger

Once the Wireless LAN connection has been set up successfully the next step is to make device settings for the data logger.

1. Connect to the TR-7wf directly from a Smart Phone or Tablet using the T&D Thermo App as following the steps 1) through 4) described in section II above.
2. It is from the Device Settings screen that TR-7wf data logger is configured for the desired operation.



3. For Example, if you tap on Start Recording, the screen on the left will be displayed. Here you can select the starting time of the recording session, the sample interval for the logger and the recording mode. Similarly, other settings can be made by tapping on the other options to set the time, the units of temperature to be displayed, the interval for uploading readings to the WebStorage Service and so on. After making the desired settings tap on Start Recording to send them to the logger.



4. Press Back twice and the App will disconnect from the logger, which will again connect to the Wireless LAN.

Tip: If you simply exit the App the logger will automatically time out of AP mode and reconnect to the LAN after 1 minute.

Note: Your TR-7wf is now configured as a logger and will start uploading Recorded Data automatically to T&D's free WebStorage Service at the interval you specified in the settings. After the first successful upload you will see the TR-7wf listed on the Top page where it will show the current readings, battery status and where you can make or change settings and view a graph of uploaded data.

IV) Retrieving Recorded Data Directly from the TR-7wf Logger

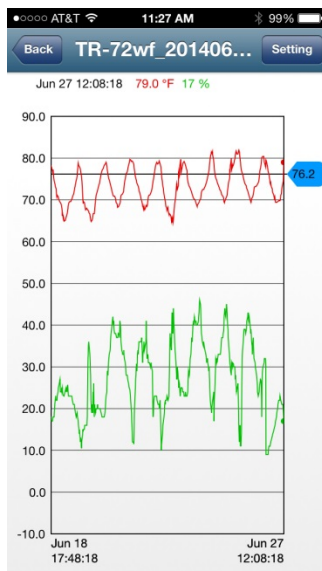
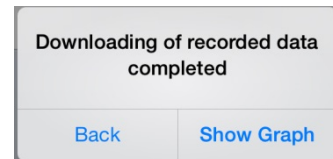
Data recorded in the logger can be downloaded directly to a Smart Phone or Tablet without connection through a LAN.

1. Connect to the TR-7wf directly from a Smart Phone or Tablet using the T&D Thermo App as following the steps 1) through 4) described in section II above.
2. In the Direct Wireless Communication Screen tap on Download Recorded Data.



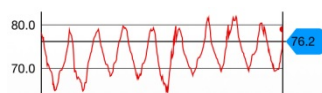
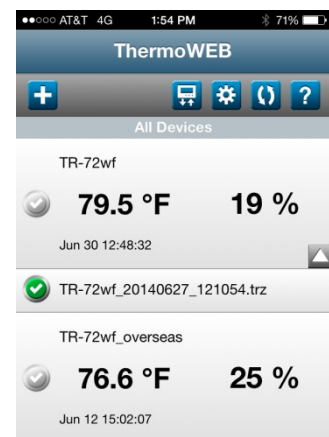
3. In the Download Recorded Data screen tap Start Downloading.

4. When the recorded data has been downloaded to your Smart Phone or Tablet it is automatically saved in local memory. If you do not wish to view the data at this time tap on Back, or you can view it immediately by tapping on Show Graph.



5. Doing this will cause the data to be displayed in graphical form similar to the image on the left.

6. As data is downloaded to your Smart Phone or Tablet, or to the WebStorage Service, each registered logger will appear in a list on the App Home Page. The latest current readings that have been uploaded to the WebStorage Service will be displayed along with a list of data files that have been downloaded to your Smart Device.



7. Note the Blue Slider. You can move this up and down to see how the graph intersects a given parameter line.

V) The T&D Thermo App Home Screen

When the T&D Thermo App first opens it will default to the Home Screen. Here you will find a list of all TR-7wf loggers that have been registered, a list of data files that have been downloaded to your Smart Phone or Tablet and two rows of buttons for invoking various actions. Some helpful information about these elements follows below:

A) Top Row Buttons

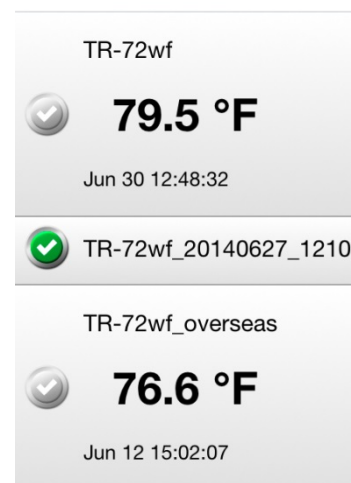


1. **Add / Remove Devices:** Tapping on this button will bring up the Add/Remove Devices Screen. From here you can register new TR-7wf logger to your device / account or remove old ones.
2. **Direct Device Communications:** Tapping this will bring up the Direct Wireless Communications Screen. From this screen you can log directly on to a TR-7wf in AP mode and download recorded data to your Smart Phone or Tablet, or make device settings for the data logger.
3. **Tools Icon:** By tapping this Icon you will call up a Setting Screen where you can manage various App functions on your Smart Device, such as enabling warning notifications. You can also add or remove WebStorage Service registered loggers for monitoring on your Smart Device. Once a logger is added, the App will automatically update the logger display on the Home Screen with the latest readings from the WebStorage Service.
4. **Sort Data:** Tapping on this Icon will open the Sort Data Screen. This will be helpful once there are a number of data files downloaded to your Smart Device. It allows for the files to be sorted in a variety of ways, such as Device Name, Date, Model, etc.
5. **Help:** Tapping on this Icon will bring up the T&D Thermo App Help Menu. This screen will show a number of useful links such as FAQ, Support, Version Level, etc.

B) Device & Data Windows:






These are the main informational windows on the T&D Thermo Homescreen. The larger windows show the TR-7wf loggers that are registered on your Smart Device. These will show the latest reading from the most recent connection to either the logger or to the WebStorage Service

The smaller windows represent data files that have been downloaded from the logger shown immediately above. Selecting any of these windows by tapping on them will allow you to use the bottom row buttons to perform various functions.

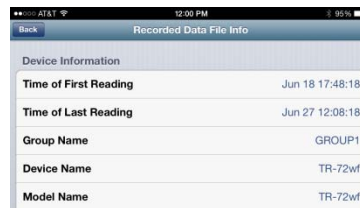
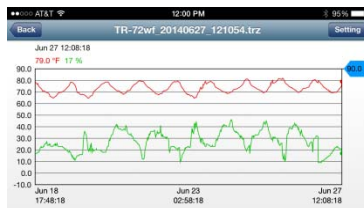


C) Bottom Row Buttons



1. **Device Settings:**  To use this Icon first select a TR-7wf logger by tapping on its window. The check mark will turn green to confirm selections. Then, tapping this button will bring up the Device Settings Window. From this screen you can make / change all of the data logger settings that you made earlier in section III).
2. **Info Button:**  This button can be used with both Data Logger windows and Data File Windows. If a Data Logger window is selected the Info button will show a number of details related to the logger and its settings. If a Data File window is selected details for the selected file and the logger that generated it will be shown.
3. **Send Button:**  This button is used to Send data files that reside on your Smart Device. Files can be either uploaded to the WebStorge Service or can be sent via Email.
4. **Delete Button:**  This is used to delete Downloaded Data Files that you no longer wish to retain on your Smart Device.
5. **Graph Button:**  This button will show a graph of the currently selected Downloaded Data File.

Hint: For an expanded view you can tilt your Smart Phone or Tablet into Landscape mode:



Recorded Data File Info	
Device Information	
Time of First Reading	Jun 18 17:48:18
Time of Last Reading	Jun 27 12:08:18
Group Name	GROUP1
Device Name	TR-72wf
Model Name	TR-72wf