TESS-W Photometer Quick Guide







1.0 version. May 2022 Jaime Zamorano: jzamoran@ucm.es

The photometer needs to be installed on an elevated spot -preferably on a roof-, with a power outlet and WIFI coverage to send the measurements in real time. TESS-W has a USB connector that allows it to be powered with a normal mobile phone charger. The charger must be placed in a covered outlet protected from the elements. A DC power source of 5V is needed.



Setting up TESS-W photometer

Step 1 Power up the photometer

Connect TESS-W to power: plug in USB to charger.

The first time the photometer TESS-W is plugged in, it creates its own WIFI network which can be accessed freely from a computer or a mobile device to perform the setup.

If you open the list of Wi-Fi networks on your laptop or phone, you'll see a list of wifi names (SSIDs). If the TESS-W name is stars606 (for example) the SSID is TESS-stars606.

Step 2 Check TESS-W wifi

- Connect to the TESS-W wifi
- Open a browser browser and enter the address: http://192.168.4.1



Screen 1 should appear after step 2.

Screen 2, after clicking in 'show settings'

Step 4 Insert the name of your wifi (Screen 3)

- Click 'Edit wifi' to select the SSID where the TESS-W will connect.
- Select wifi name from the list of available SSIDs
- Enter password.
- Click 'enviar' (spanish for send)

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9:51 7 TESS-W STARS4ALL Wifi Settings Please enter your password by selecting the SSID: ENSINCA-WIFI Password: Enviar	46 •	9:517 TESS-w Settings Edit Zero Point. Actual ZP:20.29 New ZP: Environment of the set of the s

You usually do not need to change the Instrumental constant of Zero Point that is already inserted after calibration.

Step 5 Unplug and plug the photometer

After setup it will be then necessary to unplug the photometer from the electricity outlet and plug it in again after 30 seconds. TESS-W will find and connect to the selected SSID of your router and start sending data to the broker.

Step 6 Check that the data is arriving Use this link to check the raw data from your photometer arriving https://tess.dashboards.stars4all.eu/d/tess_raw/s4a-photometer-network-raw?orgId=1&refresh=1m&v ar-Tess=stars1

where you should change 'stars1' with the name of your photometer.

If you have any questions, please contact the researchers of the UCM before continuing with the next step.

Additional information in case of new SSID or wifi password

In case you want to change the settings, such as after a password change in the wireless network, the photometer needs to be turned on in an environment in which the network is not available. To do this you can either switch off the network, or inhibit the WIFI signal, or uninstall the photometer from its location and switch it on out of the reach of the network signal.

Once you have plugged the photometer again, connect your phone to the TESS-W SSID, and open the page <u>http://192.168.4.1</u> in the browser. Follow the 3, 4, 5 steps.