

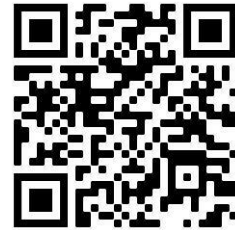
Notice:

Works only with compatible Tycon MPPT solar controllers: TP-SC24-30N-MPPT, TP-SC24-60N-MPPT, TP-SC48-60P-MPPT

1. Setup

1.1. Install either the Android or IOS app to your mobile device.

SolarMate Mobile apps are available for Android and IOS devices. QR codes to receive the apps are as follows. Any mobile device with a barcode reader app should be able to read these codes.



Android SolarMate App

IOS SolarMate App

1.2. Connect the Cloud-Box-M2 unit to either of the RS485 connections available on the compatible Tycon MPPT solar controller. The blue link LED will double flash continuously while waiting for network configuration.

1.2.1. If the led doesn't double flash, press and hold the Setup button for 6 seconds to clear the existing network configuration, then press the reset button.

1.3. Make sure your mobile device is connected to the same WiFi access point that you will be connecting to the Cloud-Box-M2.

1.4. Open the SolarMate app on your mobile device. Select "Cloud Monitor / Cloud-Box-M2". Sign-in.

1.5. Select "NEW". Your Wifi access point SSID should show in the "WIFI:" field.

1.6. Enter your WiFi access point wireless password in the "Password:" field, then select "Start Config".

1.7. The app will connect to the WiFi access point and configure the Cloud-Box-M2. A message should come up that says: "System Binding Successful". Select "Confirm"(Chinese Characters) to close the window.

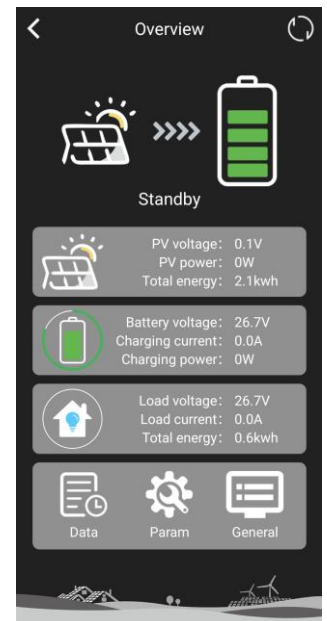
1.7.1. Once your device is registered with your chosen access point, if it has internet access, you can see the parameters and control the solar controller remotely if your mobile phone is connected to the internet via WiFi or 4G/5G cellular data.

1.8. Your Cloud-Box-M2 device will show in the Cloud Monitor window. By pressing the 3 dots icon and then "Edit" you can edit the device name and the physical location (address) of the device. This is helpful if you have more than 1 device you will want to monitor. The device name and address can help you to tell the units apart.

1.8.1. Address can be a mailing address or a description like "Sandy Pole Barn". Device number is the RS485 address of the MPPT controller. The default is "0". Do not change this unless you have changed the RS485 address in the MPPT controller to match. The only time this is necessary is if you have two or more controllers running in parallel to charge the same battery bank. In this case, the controllers are synced via RS485 and need to have different device numbers.

1.9. Save the changes after you have customized the "Device Name" and "Address" fields.

1.10. Exit the app



2. Operation

- 2.1. Open the app
- 2.2. Select “Cloud Monitor / Cloud-Box-M2”.
- 2.3. Select “List Data”.
- 2.4. Select the device you want to open and the units “Overview” screen will show.
- 2.5. You can select “PV Voltage”, “Battery Voltage” or “Load Voltage” to enter the detail screen for those items.
- 2.6. You can select “Param” to enter the screen to set the “Load Control Mode” of the Solar controller or turn the load on or off remotely. Load control mode default = ON/OFF mode. See MPPT solar controller documentation for more detail.
- 2.7. You can select “General” to enter a general setup screen.
 - 2.7.1. Select “Charge and protection param set”.
 - 2.7.1.1. Select “Battery Type” to set the battery type and battery system voltage. Default is Auto but it is a good idea to set the voltage to your actual battery array voltage.
 - 2.7.2. You can also set other parameters for charging, protection, backlight timeout and temperature display units. Be sure to Select “Save” after making any changes.

3. Additional Information

LED Definitions

Power LED = Green = Power On

Link LED = Blue

Steady On, Flash Off every 5 sec – *Connected*

Double Flash – *Waiting for Network Configuration*

Continuous Flash – *Trying to Connect*



Button Function

Reset – press to reboot the unit

Setup – Hold for 6 seconds to erase the network configuration. Use this to connect to a new network. Be sure to delete the device on the “Cloud Monitor” page before setting up a new network connection for that device.

