

Title : Equinox™ Microinverter Replacement and Recommissioning, #530868

Date : June 01, 2018

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Application : Equinox installations

Firmware Versioning

When you initiate the commissioning process (in this case *recommissioning*), the system automatically checks to see whether there is a firmware update available. If an update is available, it will begin downloading automatically.

**Every single time you land on
the [SunPower PVS Management App](#) page, refresh the page before you do anything else.
Doing so will save you time and speed the successful recommissioning of the system!**

After you refresh the page, verify that firmware version v2018.05.32 (OR higher) displays in the lower right corner of the **SunPower PVS Management App** page.

Commissioning Best Practices

- Use **only** Google Chrome OR Mozilla Firefox as your browser—*do not use Internet Explorer or any other browser.*
- Every single time you arrive at the **SunPower PVS Management App** page, refresh the page.
Yes—every time.
- Exit your browser completely after you finish the recommissioning process.

Be Aware

- When you are discovering devices and when you are claiming them, please be patient and expect the process to take several minutes.
- If you see an error message on the **Review Site Information** page, it is safe to ignore it.
- After you complete the discovery process and the device-claiming process, you must recreate the array layout (as you normally do on a new system).
- After you complete the full procedure described in this Tech Note, you must call SunPower Technical Support.

Overview

This Tech Note describes how to replace microinverters in a SunPower Equinox system; and then recommission the system.

It is critical that you reference the following SunPower documents in parallel with this Tech Note:

- *SunPower Type C and Type D 96-Cell AC Module Microinverter Field Replacement Procedure (#521945 RevA)*
- *SunPower Equinox Installation Guide (#518101 RevD)*

Each of these documents (as well as this Tech Note) are available on the Equinox Installation Support page—your go-to repository of information to help ensure safe, smooth, high-quality Equinox installations:

<https://us.sunpower.com/support/install/equinox/>

Outline

For the example replacement and recommissioning described in this Tech Note, we will use a site that has 39 existing Type C AC modules.

1. Turn off the PV Supervisor (PVS) by opening its breaker.
2. De-energize (turn off) the AC modules by opening the solar system breakers.
3. Referring to the *Equinox Installation Guide*, remove the modules from the array.
4. Referring to the *Type C and Type D 96-Cell AC Module Microinverter Field Replacement Procedure*, remove the microinverters from the modules and install the replacement microinverters.
5. Reinstall the modules in the array.
6. Energize the AC modules by closing the solar system breakers.
7. Energize the PVS by closing its breaker.
8. Remain at the site and use the PVS Management App to perform the re-commissioning steps.

Procedure

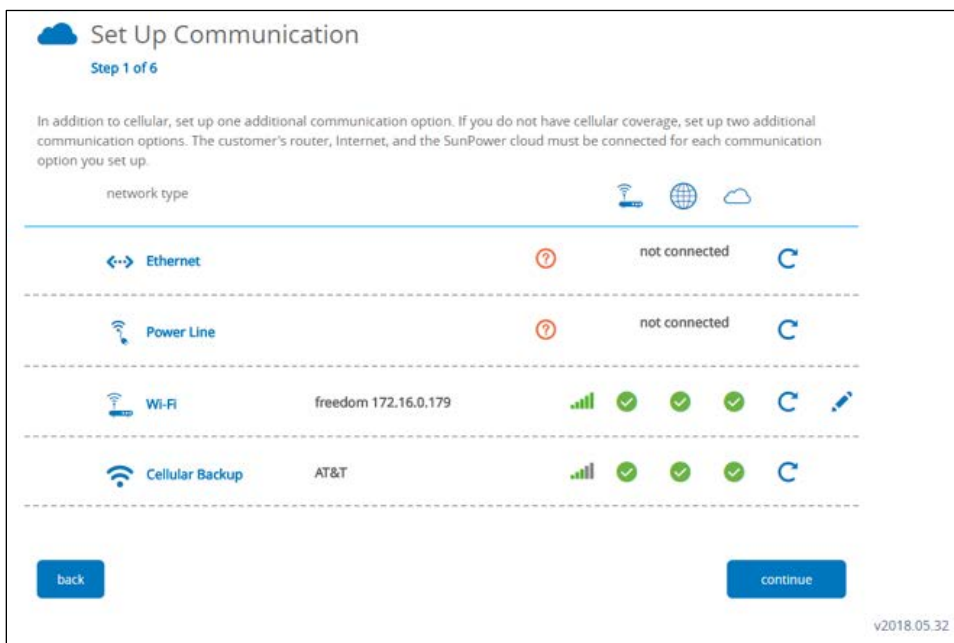
This section describes the steps that begin after you complete Step 7 of the outline.

1. Access the **SunPower PVS Management App** page.
2. Refresh the page.
3. Verify that the firmware version in the bottom right corner of the page is **v2018.05.32** (OR higher), and then click **Residential**:



Important! If there is no version number, or if the number is less than v2018.05.32, refresh the page!

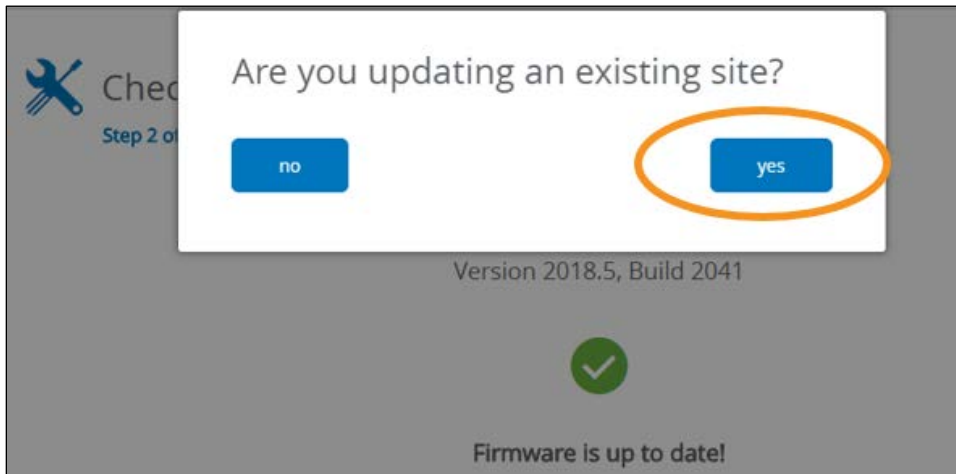
4. On the **Set Up Communication** page, verify that at least two communication options are operational (green checkmarks are present). If the **Cellular Backup** row is not operational, power cycle the PVS5; and then click **continue**:



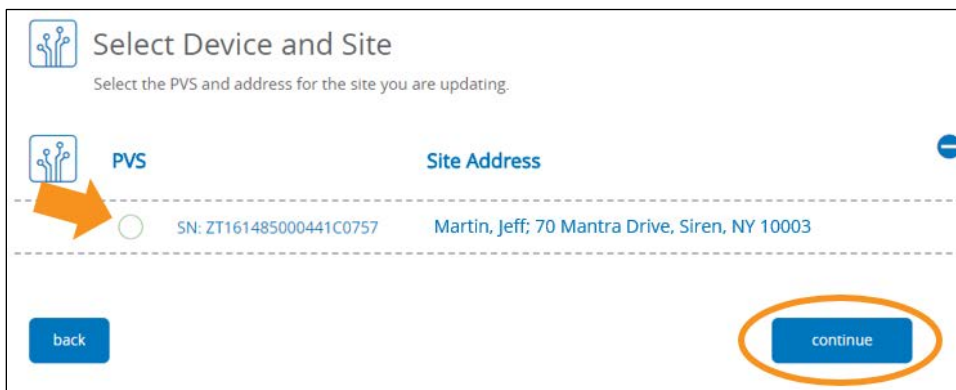
5. Click **continue** on the **Check Firmware** page.

Note: If an update is available it will download automatically.

6. When the popup appears asking whether you are updating an existing site, click **yes**:



7. On the **Select Device and Site** page, select the correct PVS row for the site and then click **continue**:

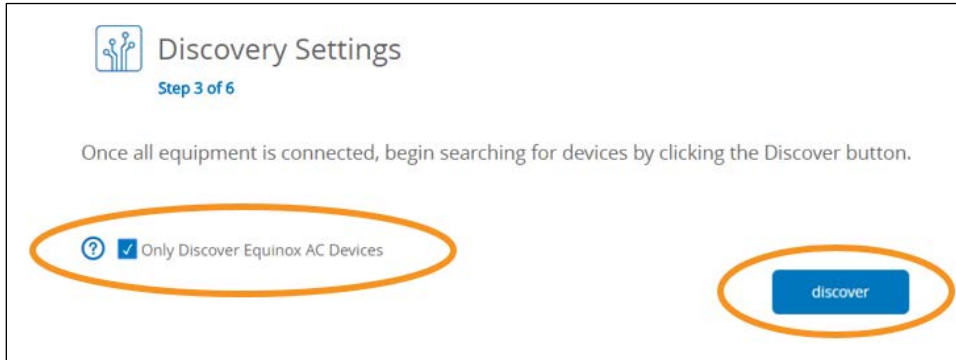


Important! If the site has more than one PVS, you must perform these steps for *each* PVS in the system.

8. On the **Configure Devices** page, click **rediscover**:

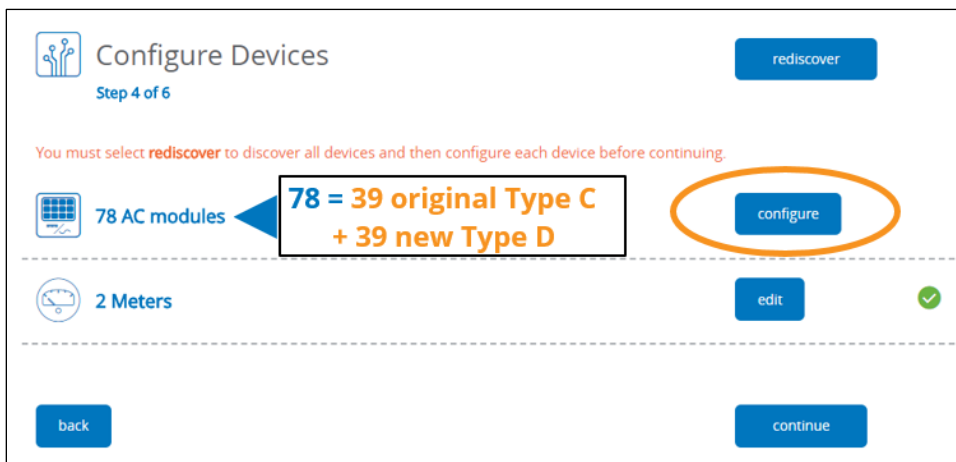


9. On the **Discovery Settings** page, select the **Only Discover Equinox AC Devices** checkbox, and then click **discover**:



Please be patient while the discovery process finds the newly installed microinverters.

10. The **Configure Devices** page will now show both the previously existing modules as well as the newly installed. Click **configure**:



11. All 78 of the rows (39 Type D + 39 Type C) display with their checkboxes selected:

78 AC modules

Grid Profile: IEEE-1547 (default)

Uncheck the AC modules that you did not install at this site. All checked AC modules will be claimed for this site and will not be available at other sites, even if physically installed elsewhere. Specify the model of each AC module.

Total Discovered: 78 **78 = 39 original Type C + 39 new Type D**

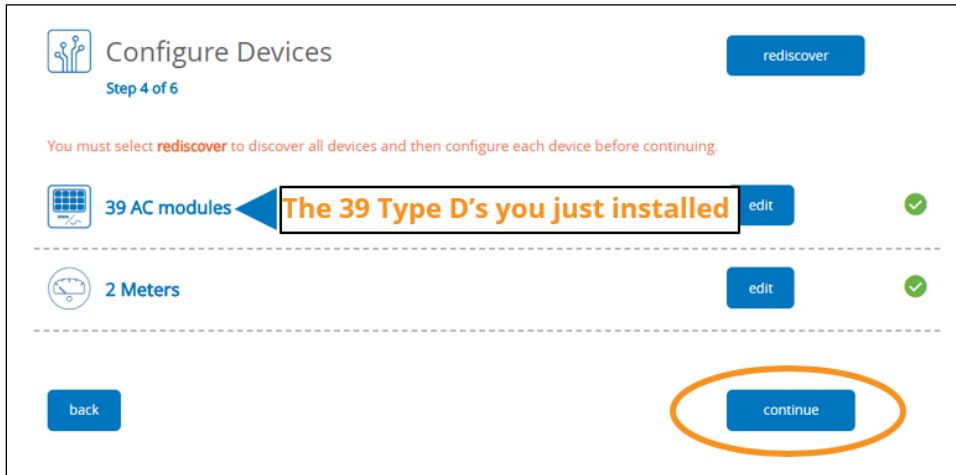
<input checked="" type="checkbox"/>	Serial Number	Module Type	Model	enter wattage or model and select
<input checked="" type="checkbox"/>	450051804006108	AC Module Type D		enter wattage or model and select
<input checked="" type="checkbox"/>	450051804000348	AC Module Type D		enter wattage or model and select
<input checked="" type="checkbox"/>	450051804000974	AC Module Type D		enter wattage or model and select
<input checked="" type="checkbox"/>	450051804003938	AC Module Type D		enter wattage or model and select
<input checked="" type="checkbox"/>	450051804003984	AC Module Type D		enter wattage or model and select
<input checked="" type="checkbox"/>	450051804004050	AC Module Type D		enter wattage or model and select
<input checked="" type="checkbox"/>	450051804004172	AC Module Type D		enter wattage or model and select
<input checked="" type="checkbox"/>	450051804004188	AC Module Type D		enter wattage or model and select
<input checked="" type="checkbox"/>	450051804010959	AC Module Type D		enter wattage or model and select
<input checked="" type="checkbox"/>	450051804011114	AC Module Type D		enter wattage or model and select
<input checked="" type="checkbox"/>	Serial Number	Module Type	Model	enter wattage or model and select
<input checked="" type="checkbox"/>	414051624000642	AC Module Type C	SPR-X21-335-BLK-C-AC	
<input checked="" type="checkbox"/>	414051624000153	AC Module Type C	SPR-X21-335-BLK-C-AC	
<input checked="" type="checkbox"/>	414051624000238	AC Module Type C	SPR-X21-335-BLK-C-AC	
<input checked="" type="checkbox"/>	414051624000291	AC Module Type C	SPR-X21-335-BLK-C-AC	

12. Select all of the Type D checkboxes.
13. Clear all of the Type C checkboxes.
14. Click **done**:

Serial Number	Module Type	Model
<input checked="" type="checkbox"/> 450051804008696	AC Module Type D	SPR-X21-335-BLK-D-AC
<input checked="" type="checkbox"/> 450051804009593	AC Module Type D	SPR-X21-335-BLK-D-AC
<input checked="" type="checkbox"/> 450051804010103	AC Module Type D	SPR-X21-335-BLK-D-AC
<input checked="" type="checkbox"/> 450051804010707	AC Module Type D	SPR-X21-335-BLK-D-AC
<input checked="" type="checkbox"/> 450051804010821	AC Module Type D	SPR-X21-335-BLK-D-AC
<input checked="" type="checkbox"/> 450051804010959	AC Module Type D	SPR-X21-335-BLK-D-AC
<input checked="" type="checkbox"/> 450051804011114	AC Module Type D	SPR-X21-335-BLK-D-AC
<input type="checkbox"/> 414051624000642	AC Module Type C	SPR-X21-335-BLK-C-AC
<input type="checkbox"/> 414051624000238	AC Module Type C	SPR-X21-335-BLK-C-AC
<input type="checkbox"/> 414051624000291	AC Module Type C	SPR-X21-335-BLK-C-AC
<input type="checkbox"/> 414051632000626	AC Module Type C	SPR-X21-335-BLK-C-AC
<input type="checkbox"/> 414051632000865	AC Module Type C	SPR-X21-335-BLK-C-AC
<input type="checkbox"/> 414051632001307	AC Module Type C	SPR-X21-335-BLK-C-AC
<input type="checkbox"/> 414051632001974	AC Module Type C	SPR-X21-335-BLK-C-AC

back done

15. Click **continue**:

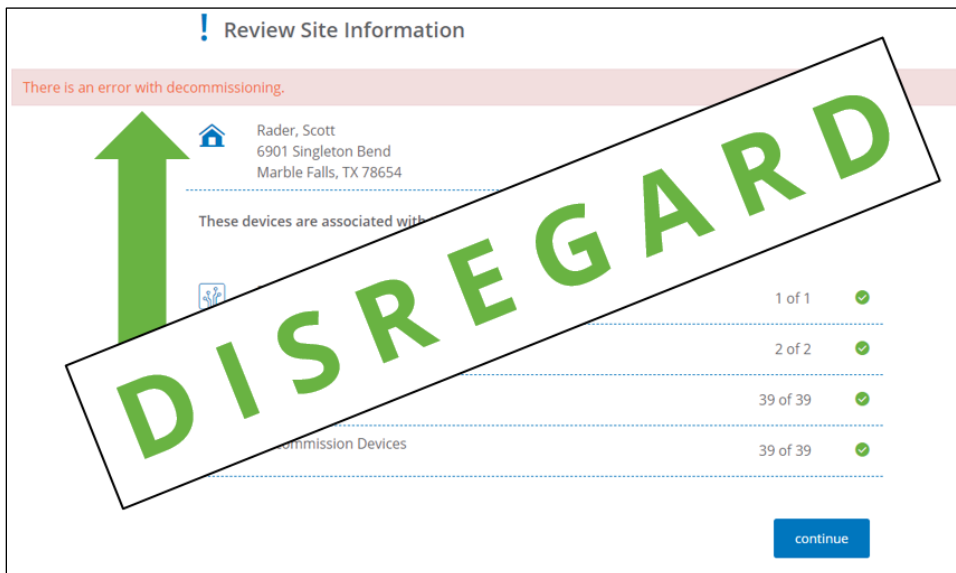


Please be patient while the newly installed microinverters are claimed.

16. When the **Inverter Configuration Complete** popup appears, click **continue**.


17. On the **Verify Device Operation** page, verify that each module is producing power and then click **continue**.

18. When the **Review Site Information** page appears, if you see an error message, it is safe to disregard it and proceed:











The page displays the 39 new Type D's that you just installed and recommissioned; and the 39 Type C's that you just removed and decommissioned:

! Review Site Information

 Martin, Jeff
70 Mantra Drive
Siren, NY 10003

These devices are associated with this site:



	PVS: 'ZT161485000441C0757'	1 of 1	
	Meters	2 of 2	
	AC Modules	39 of 39	
	Decommission Devices	39 of 39	

[continue](#)

Note: If you do see a decommissioning error message at the top of the **Review Site Information** page, you may safely ignore it. It may disappear if you refresh the page, but in any case the underlying functionality works correctly and the message will be addressed in the next release.

19. Click **continue**.
20. Complete the module layout (as you normally do as part of a new installation), and then call SunPower Technical Support at 1-855-977-7867—or email us—to let us know which site you recommissioned.
21. Congratulations—you're done!

SUNPOWER®

 **Site Successfully Commissioned!** 

Please click [create customer account](#) to create an EnergyLink monitoring account for the customer.

Martin, Jeff
70 Mantra Drive
Siren, NY 10003

PVS SN:
ZT161485000441C0757

[create customer account](#)
[dashboard](#)

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