What Do the Readings on Your Solar Panel Inverter Mean?



Vac [V]:

249.8. The Vac is the alternating current (AC) voltage on your main electricity line. That number will always be around 240, because that's the standard service voltage provided for homes. When your inverter converts the DC electricity into AC, it matches that voltage when pushing excess power back to the grid.

Vdc [V]:

375.7. The Vdc is the DC current voltage produced by your panels. If we were to compare electricity to water running through a pipe, voltage is the amount of water pressure inside the pipe. How quickly the electricity flows through the pipe depends on the amount of wattage produced by your panels. Your inverter takes this DC electricity and converts it to AC.

Pac [W]:

2545.8. Pac refers to Power AC, and this is the amount of power your panels are generating in watts. You can tell that it must be a beautiful sunny day, because the wattage is quite high for 22, 295-watt panels. When it comes to monitoring, Pac is the most important spot reading you will get from the inverter.

P_OK:

034/034. This means that your inverter is communicating with all 34 panels installed as part of your array. If that first number shows something less than 34 (or whatever total number of panels you have), there may be something amiss. When your panels begin producing in the morning, it may take a few minutes for all the panels to respond and show up on the display. That is normal.

<S_OK>:

This means that the inverter is connected to the monitoring platform. More on that in a second.

ON:

This is the easiest one. Your inverter is turned on! It simply would say "off" it wasn't.