

An inverter is a critical piece of equipment in any grid tied solar array. There are two different types of inverters; a bank or string style and micro inverters.

Advantages of Enphase Micro Inverters

- If a bank style inverters goes bad you will not know until you both review your electric bills or the monitoring package and notice an issue.
 - You then call the installer who will come out and test it, determine if it is bad, then send it (via freight hauler) to the manufacturer to confirm it is defective. If it is found to be defective the cost of the new inverter will be credited, but freight costs will not.
 - In the meantime the whole system is down and producing zero.
 - If a micro inverter goes out you and I will get an email alert that there is an issue of non-production. Enphase will remotely reflash the inverter and determine if it is defective. The reflashing will either work or they will send a new inverter via FedEx. They will pay us to go out and replace it.
 - In the meantime you only lose production from one inverter.
 - If a panel goes out on a bank style inverter system you may never know. In order to find out you have to compare your electric bills one year to the next, notice an issue, then request a company to come out an diagnose it. You (or the supplier) will have to buy another panel, replace the proposed defective panel, send it back (paying shipping) for it to be diagnosed. If it is determined to be defective the new panel will be credited.
 - With Enphase inverters you and I will both get an email alert for non-production. Enphase will remotely diagnose it. SolarWorld will accept the online data from Enphase that determined their panel was defective and a new one will be sent out.
 - Bank style inverters have a five year warranty (optional ten year available at an extra cost)
 - Enphase inverters have a twenty-five warranty
 - Bank style inverters receive series wired DC strings from the panels.
 - When one panel has a leaf, shade, bird droppings etc. on it, it will bring all other panels in the string down. It is like a bad cell in one battery of a large battery bank or a series wired string of Christmas lights, it brings the whole string down.
 - DC has a much higher amount of power that is lost from voltage drop than AC does. Since micro inverters converter to AC immediately and bank inverters do not, the micro inverters will harvest more power.
 - Micro inverters isolate any issue to one panel. They also convert the energy to AC immediately decreasing voltage drop.
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