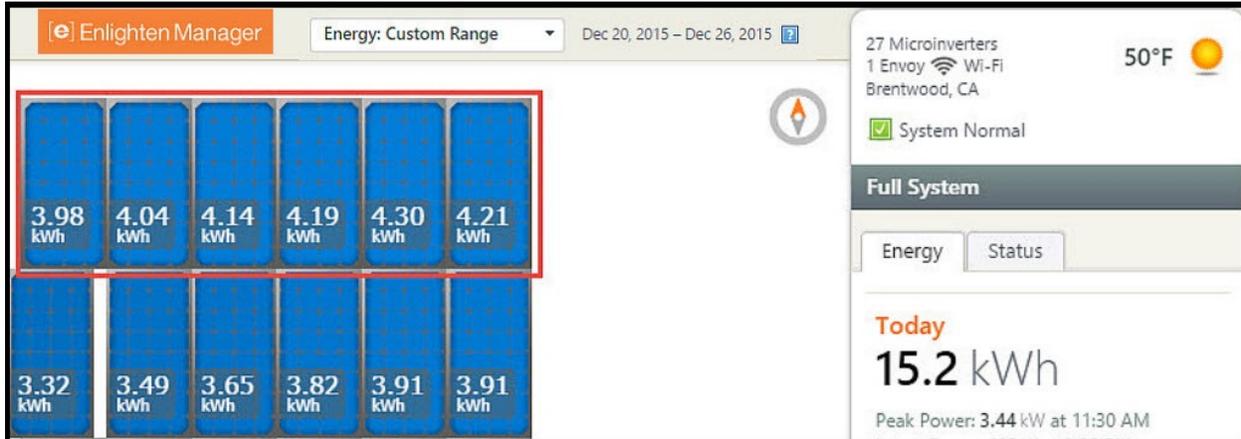


## SolarEdge Power Optimizers vs Enphase Microinverters: Which produces more energy?

These 2 residential systems are located in Brentwood, CA and are located in the same neighborhood, same street and in fact are separated by only 4 houses between them. Great for our comparison.

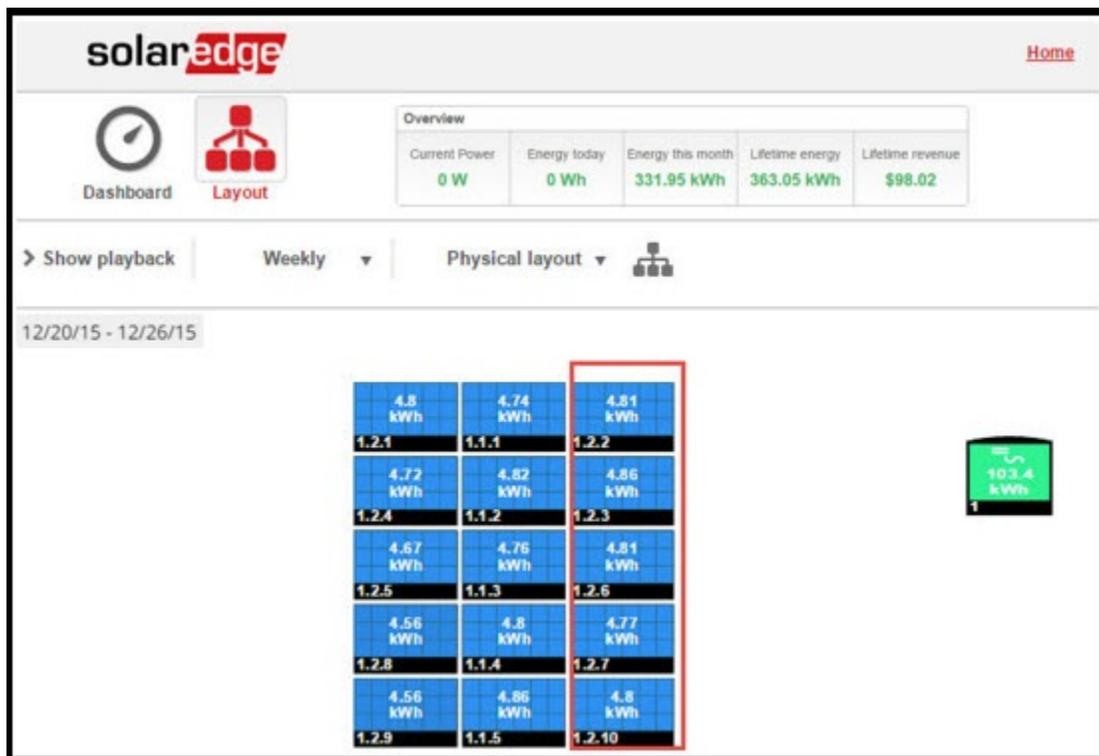
**Solar System #1 Enphase** Installed July 2014, 27 Canadian Solar 255w polycrystalline panels with 27 Enphase Microinverters.

- The 6 panels highlighted in red are oriented at 180 degrees, 4:12 roof pitch and 100% sun availability



**Solar System #2 – SolarEdge** Installed December 2015, 22 Canadian Solar 260w polycrystalline panels with 22 Power Optimizers and 1 SolarEdge central inverter.

- The 5 panels highlighted in red are also oriented at 180 degrees, 4:12 roof pitch and 100% sun availability



Apart from the difference that one home has Enphase and the other has SolarEdge there are two noticeable differences that should be noted:

1. The Enphase system was installed 16 months before the SolarEdge, therefore the system is slightly older, but not by much. The net effect of the overall system degradation compared to the most recently installed SolarEdge system is negligible.
2. The SolarEdge system's panels are the same brand and type, but each panel is 5w more power (260w vs 255w) than the Enphase system which results in 2% more power overall.

So let's compare the 2 systems. First, the Enphase. For the week of December 20<sup>th</sup>, Enphase's best panel produced 4.3 kWh's. Now take a look at the SolarEdge Power Optimizer system. The best SolarEdge powered panel highlighted in red was at 4.86 kWh's.

In this case, **the SolarEdge Power Optimizer system is outperforming the Enphase system's energy production by 13%**. Duly note, the SolarEdge system is comprised of solar panels that are 2% more powerful (260w vs 255w) but that in no way should account for a 13% difference in total kWh power production if both system options were comparable. The bottom line is the SolarEdge system undoubtedly generates higher levels of energy production when compared to Enphase.

SolarEdge vs Enphase Case Study:

December 29<sup>th</sup>, 2015

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