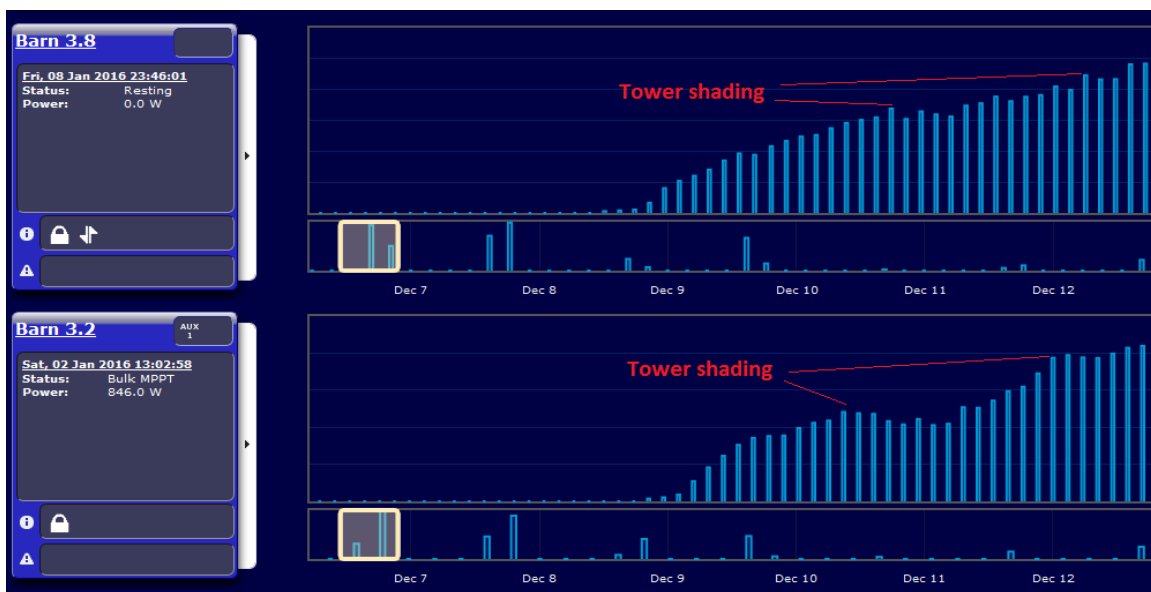# Tigo Optimizers and MidNite Solar Classic charge controller compatibility

History
Some time ago we found that if a Tigo Optimizer was used with a Classic, the fast track mode (Solar) on the Classic made the optimizer do some interesting things. One of them was they presented a short to the PV input of the Classic and this would damage the Classic. It was determined that by running the Classic in slow track mode (Legacy P&O) that everyone was happy and things generally worked as they should. This forced us to put a warning in the Classic manual but it became apparent most people do not read the manual. So we then put a single yellow piece of paper on top of the manual in the box with every Classic labeled "Danger of Death to your Classic" and added the Tigo warning to that page.

Action
Tigo reached out to us to see what could be done about this as they believed this was due to the design of the first generation of the optimizer and this was no longer an issue. They supplied MidNite Solar with the new generation of optimizers and we have run extensive testing. We are very happy to say not only did the optimizers and the Classic's play perfectly together the test array actually made more power due to a shading issue we have from 9AM to 11AM with a broadcast tower going across the array. The top array has Tigo optimizers and the bottom array does not.

Conclusion
Our final conclusion in this joint testing effort is that the newer Tigo Optimizers work very well with the Classics and we will now endorse the use of the newer Tigo Optimizers on our charge controllers. Below is a list provided by Tigo that shows the different series of optimizers and what tracking mode the Classic will need to run in.

Tigo® Optimizer	Running mode on the CLASSIC
Generation 1 ES Series	Legacy P&O
Generation 1 Smart Modules	Regular (Solar)
2ES Series	Regular (Solar)
TS4 Platform	Regular (Solar)

For assistance please feel free to contact:

Ryan Stankevitz
MidNite Solar inc
ryan@midnitesolar.com

or

Gal Bauer
Tigo Inc
gal.bauer@tigoenergy.com