

FESC Partnership with Petra Solar

By Issa Batarseh and John Shen



Petra Solar is a technology company, focused on providing reliable, cost effective smart energy solutions to the electric supply industry. Founded in 2006 with licensing several key inventions developed at UCF, Petra Solar revolutionized the distributed solar and smart grid industry by pioneering Smart Solar technology that combines distributed solar energy generation with smart grid communications and improved grid reliability features to create a utility grade solution that delivers high economic value for solar power.

Petra Solar has developed an innovative SunWave™ Smart Solar system that allows a PV panel, a micro-inverter, and the communication unit to be mounted on a utility or light pole or the rooftop of residential and commercial buildings. Petra Solar has signed a \$200 million contract with a leading U.S. utility company to deploy this technology on a very large scale.

UCF and Petra Solar partnership began in 2007 when Petra solar recruited several doctoral students from UCF and funded UCF for \$900K to carry on research and development activities. The partnership continued when FESC was launched. Since 2009, FESC has played a major role in the company's success in developing new smart energy technology. The power electronics research at the University of Central Florida, supported by FESC grants, was closely tied into Petra Solar's technology development. With Petra Solar's R&D center located in the UCF Research Park, Petra Solar benefited greatly for its partnership opportunities including carrying out joint research and development, student training and internships, and talent attraction and recruitment.



“The role of UCF research and FESC’s support in Petra Solar’s success cannot be overstated. We worked as a team and together accomplished a lot,” says Khalid Rustom, former UCF researcher and now a business development manager at Petra Solar.

“The partnership between UCF and Petra Solar exemplifies the central idea of our center in fostering commercialization of university research and aiding the economic development in the state of Florida,” said Professor Issa Batarseh, the Director of Florida Power Electronics Center at UCF, and co-founder of Petra Solar.

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