

**PROXYEM**  
Powered by PROXYEM



 **PROXYEM**

3099 S 1030 W. Suite B  
Salt Lake City, Utah 84119  
Phone: (801)-747-9405  
E-mail: [info@proxyem.com](mailto:info@proxyem.com)  
Website: [www.proxyem.com](http://www.proxyem.com)

**PROXYVAR**

**Optimizing Solar Power Savings**





## CHALLENGES IN PV SOLAR

Today's PV Solar systems produce Watts, Amps and Volts in Direct Current, which are then converted to Alternating Current to be used. Where the challenge comes from is today's systems do not create the Full-Featured power needed to operate effectively. Without Reactive Power (VAr) added to the Watts, Amps and Volts produced the electricity cannot flow effectively throughout a facility and back onto the grid. Because of this, the Power Factor worsens and a substantial amount of kWh is lost to heat.



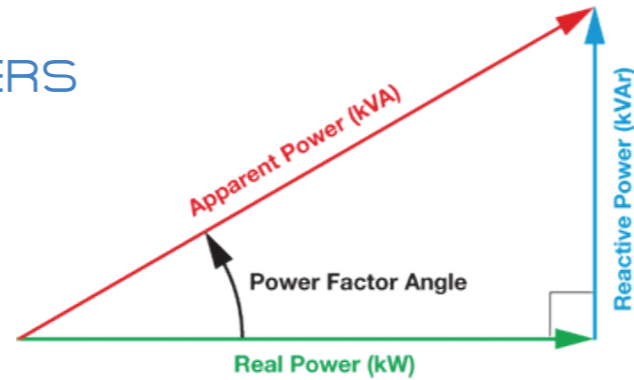
Today's solar inverters convert DC to AC power, but do not provide adequate Reactive Power.

## ELECTRICAL GRID & SOLAR

- Grid supplied power is "Full-Featured"
- Only Full-Featured power "reacts" to sudden changes in loads
- Solar does not generate Reactive Power (VAr)

## WHY REACTIVE POWER MATTERS

VAr = Volt Amps Reactive. VAr is the "Force" that moves electric power through and inductive load with sufficient energy to conserve the magnetic fields necessary for proper operation. VAr is a natural component of magnetically generated power using magnetic flux fields (MFF). VAr is required to maintain Voltage that delivers active power or Watts through transmission lines.



Power Factor is a measure of power being paid for but not used.

# THE PROXYEM SOLUTION



## THE PROXYVAR

Proxyem's® "ProxyVAR™" is the solution for the missing Reactive Power (VAr) not generated by today's PV solar systems. Combined with a PV Solar system, sized correctly ProxyVAR™ will eliminate power factor issues and will increase solar kWh effectiveness by reducing inefficiency. This makes solar power Full-Featured thus eliminating the need to pull VAr from the grid. ProxyVAR™ is the total solution for your PV Solar system.

## PROXYVAR BENEFITS

- Provides VAr Inductively
- Filters Harmonic Resonance
- Brings Power Factor to Unity
- Increases PV Solar ROI
- Facilitates Solar Effectiveness



Our power factor was running in the 70's with substantial penalties each month. Since we installed the ProxyVAR power factor correction system three years ago, our power factor has consistently stayed in the high 90's and our power factor penalties have disappeared.

- Jim Russell, DFCM Program Director, Construction Management

Our power factor penalties were costing us a lot of money. PROXYEM installed their ProxyVAR system and our power factor immediately went into the high 90's. We no longer pay power factor penalties."

- Dale Hatch, Operations



## EASY

- Online Sizing Available
- Rate Schedule Calculations

## SAVINGS

- Maximized Solar ROI
- Lower Power Bills

## GUARANTEED

- Eliminates Power Factor Penalties
- Power Factor at Unity

## EMPOWERING SOLAR WITH PROXYVAR™

Interested? Let our experts teach you more about VAr and Power Factor

801.747.9405  
www.PROXYEM.com

