

## Protecting Your Green Investment

**With Utility fed power projected to increase by 31% over the next ten years, many people are looking at shifting over to alternate power sources.**



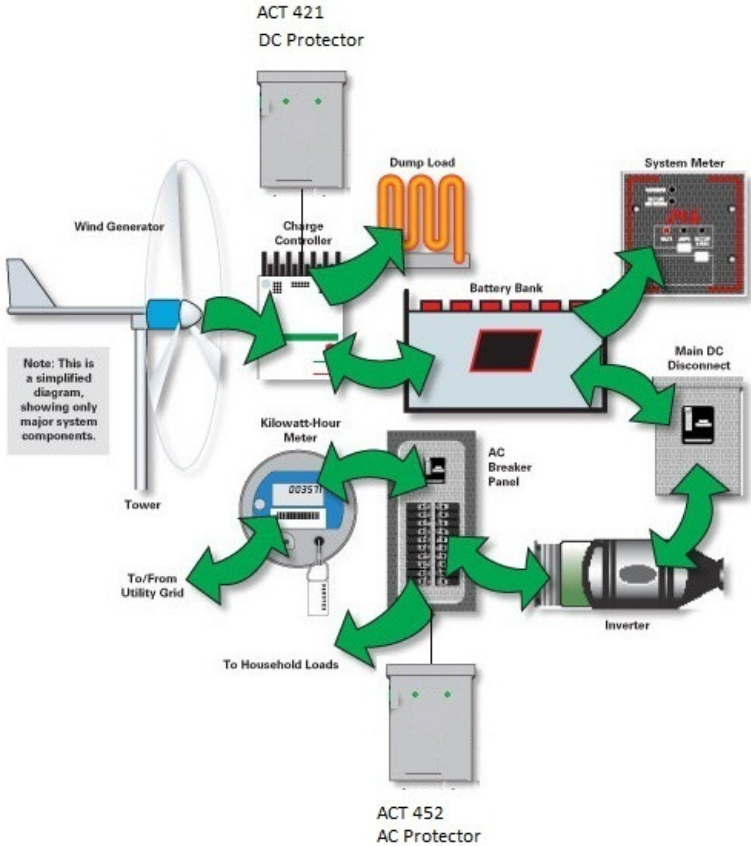
Solar and Wind Energy are the two most widely used forms of Renewable Energy. Wind Energy has been the dominant of the two in the last 2 decades as falling prices of Wind Power has made it more widely used in North America with growth rates of almost 25% in the last decade. However the rapidly declining costs of Solar Energy has made it the actual faster growing market of the two, with 50% annual growth being seen in the last decade. Solar Energy also has a much larger customer potential than any other form of Energy. While its higher costs have inhibited its growth till now, the entry of low cost Asian producers and fast technology innovation has already brought solar power on parity with fossil fuels in some states.

Taken with that many companies have made commitments to their stockholders that they will lower their carbon foot print, and over the next five years have aggressively are expected to add alternative energy systems to their building plans. What grabs their attention is the Return on Investment (ROI) models that can be made for under ten years or less, with the expected life of the product at nearly thirty years, this savings can add up to a lot of money, especially if expected inflationary pricing is considered over the whole life span of the product.

The fastest grassroots movement for alternative energy by far is in the homebuilding sector. Here we see individuals concerned by their 2 to 3% rate increases per year that are adding up to rate increases over 31%; with others looking to lower their carbon footprint. Homeowners started investing in low impact housing, with ROI models in 5 years or less for Wind and 10 years or less for Solar, but with equipment life models of over twenty to twenty-five years.

Because both solar and wind energy requires sensitive parts to be exposed to the harsh environments, **surge protection** is the key product to protecting the both Commercial and Homeowners expensive investment. The amount of protection will be directly related to the actual risk to damage. Answering these few questions, can help ACT Communications or it's representative determine the size of protector needed:

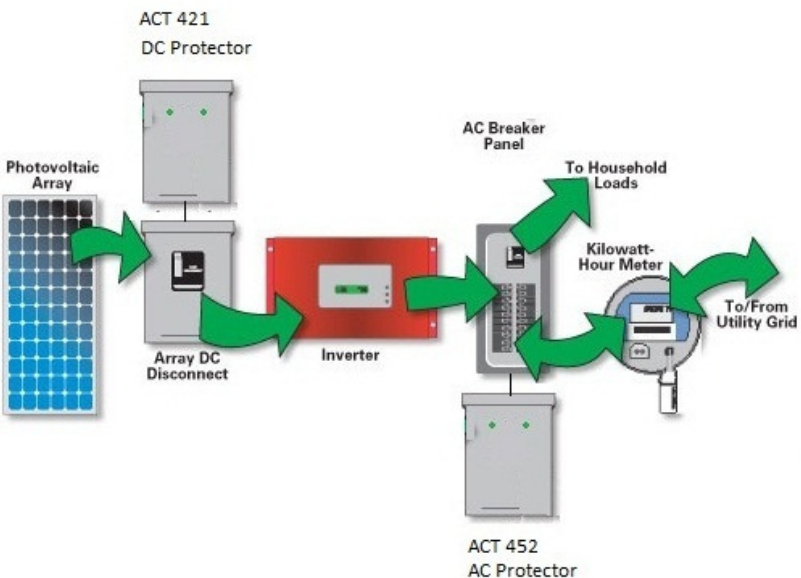
1. **What is the number of lightning storms in your area?**
2. **Does the surge protector need to be mounted outside or can it be mounted indoors near the DC or AC Panel?**
3. **What voltage level is found on the DC side of the system (example 12, 24 or 48VDC)**
4. **What is the voltage level is found on the AC side of the system (typical 120/240 VAC)**



A Wind Turbine can generate either AC or DC power, but regardless of the Voltage type selected, it is extremely sensitive to lightning strike damage because the turbines are sitting on top of a metal tower or building. When lightning strikes within 5 miles of a tower, hazardous transient energy can be coupled onto the electrical wires, damaging sensitive electronic devices in the power grid and at the load. It is important that ANY copper wire feeding into or out of a building will be a RISK point in your expensive energy source and should be surge protected.



Like the Wind Turbines, Solar Panels Power Systems are also mounted in highly exposed areas that are susceptible to both Lightning and Ground Potential Rises caused by nearby transient surge activity.



Protect your costly GREEN Investments by installing the ACT 421 and ACT 452 surge protectors and power filters.

**ACT Communications, Inc.**  
**THE FIRST NAME IN SURGE PROTECTION**