



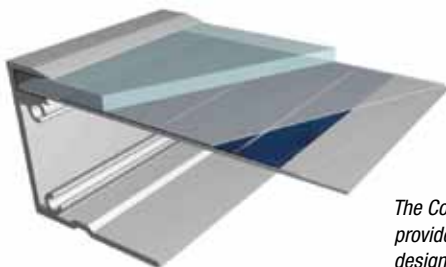
# Conergy PowerPlus: Uncompromised Performance

## **Peace of Mind: Long term strength, durability and security**

When you choose a photovoltaic (PV) module for your home, there is a lot to think about. It's essential to make sure your solution will protect you against rising energy costs, lower your monthly utility bill and provide you the greatest return on your investment in years to come. In other words, you need the Conergy Power Plus solution that provides long term strength, durability and security while backed up by in-depth experience and proven technology.

## **Withstands the test of time**

Your PV modules need to minimize the load on your roof yet have high strength to provide the mechanical stability needed to maintain the tight moisture barriers and seals inherent to the PowerPlus assembly. The Conergy PowerPlus frame was designed by Conergy's own mounting systems engineering department using knowledge and expertise gained in over 10 years of aluminum extrusion design and manufacturing. The result is a proprietary aluminum frame that is both light and strong and that meets the industry's most demanding standards. Black anodizing further protects the PowerPlus frame while enhancing the look of your home. The cavity free frame design ensures no breakage due to freezing and thawing water which could cause loss of performance or affect the safe operation of your PV components. Our proprietary frame, combined with our sealed junction box allow for safe, warranted short-side mounting, providing greater design flexibility to meet your energy requirements.



*The Conergy PowerPlus frame provides strength, durability and design flexibility.*

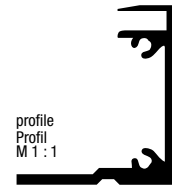
To ensure a long life, Conergy PowerPlus modules are precision-manufactured with fully automated processes from beginning to end with care and attention to detail and quality. Every dimension is carefully checked by both human and robotic operators. We offer a full 5-year warranty on material and workmanship defects plus an industry-exclusive 5-year extension to the original material and workmanship warranty.<sup>1</sup>

## **Maintains efficiency**

It's important to have an ultra-low frame profile to achieve the most efficiency and keep your operating costs low. The PowerPlus low-profile frame holding the glass, eliminates any shading of the photovoltaic components even at very low sun angles so the module can continue to produce energy even in those low sun angle/low light conditions. This low profile edge also minimizes any build-up of water from precipitation or condensation as well as dirt that can reduce the module's efficiency.

## **Sustained efficiency means more money in your pocket**

In order for a module to provide the highest yield and lower your energy costs, the maximum amount of light must fall on the cells within it. In addition to contributing significantly to the overall strength and durability of the PowerPlus module, Conergy's unique Structured Solar Glass is specifically formulated to pass all the light in the visible spectrum and even light outside the visible spectrum in order to allow the module to convert as much light of all wavelengths to energy as possible.



*Low-profile glass frame minimizes shadowing and dirt or water build-up.*

<sup>1</sup> Please ask your Authorized Conergy PowerPlus dealer for details. Extended warranty available at nominal additional cost.

### **Solar Glass designed for high performance and results**

Conergy's Structured Solar Glass provides two different microstructure surface treatments to optimize the energy yield of the PowerPlus system in varying light conditions and provide you with lower utility costs.

The external side of the glass is manufactured with a special microstructure that is designed to reduce or eliminate reflection. Reflected light is light that can't make its way in to the solar cells and generate electricity. The anti-reflective treatment on the PowerPlus glass makes sure that all the light that falls on the cell gets put to use in the cell, increasing efficiency.

The bottom side of the glass is designed to work in conjunction with the microstructure on the surface of the module's cells. Light passing through the lower microstructure of the glass is distributed so that it falls most effectively on the surface of the cells. The cell surfaces themselves are structured to complement and match the glass structure in order to make the maximum use of the light available. This complementary structure, along with the high-transmissivity of the glass contributes to the PowerPlus' low light performance.

### **Chemical-resistant**

Whether it is air with a high ammonia concentration over livestock buildings or salty sea air in coastal regions, our modules are resistant to long-term chemical attack thanks to high-quality materials and excellent sealing against corrosive external environments. This has been independently confirmed by the DLG and TÜV inspection agencies.



### **Protected from the elements**

Conergy's PowerPlus has been rigorously tested to provide the security required to withstand extreme weather conditions and weight loads. The solar glass on the PowerPlus is strong enough to resist one-inch hailstones falling at 80mph. Plus, PowerPlus solar glass and the PowerPlus frame combine to form a mechanical structure capable of holding up to 13 pounds per square foot. This is roughly equivalent to a wind speed of 205mph.

### **PowerPlus: One Exceptional Solution**

If you are looking for a solar solution that is built to last so it can provide you with economic benefits both now and down the road, the Conergy PowerPlus PV module is the answer. Conergy's PV modules are designed, manufactured and tested to insure you don't have to compromise on high quality, robust reliability and exceptional long-term yield. PowerPlus is the no-compromise solution.