



# POWER ACTUATED SOLAR AWNING

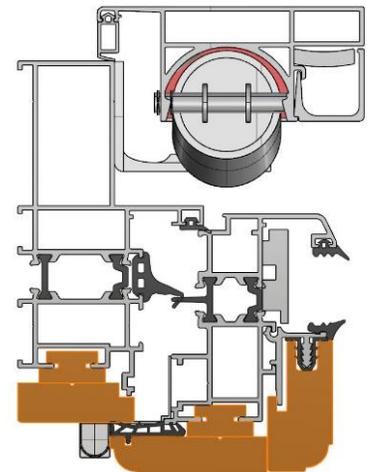
Integrate power of solar energy to your windows or mount the awning directly to your wall with G-P LLC's power actuated solar awning. With our **Bluetooth, remote controlled linear actuated system** it's never been easier to adjust the tilt of PV modules.

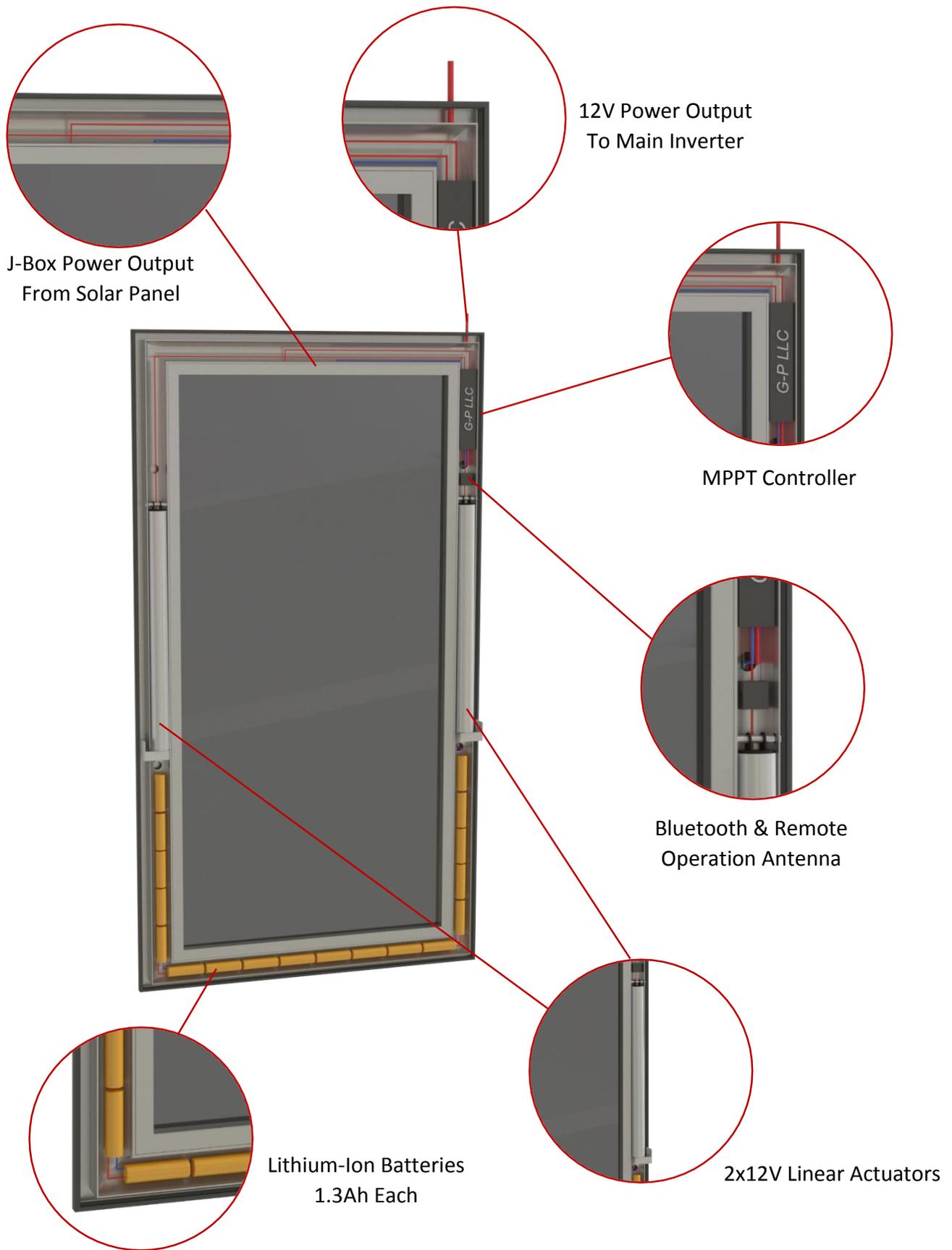
The awning can be **integrated into one of our window** products or it can be **installed independently** as a regular awning. It is made out of aircraft grade aluminum alloy frame with 20 years of powder coating guarantee.

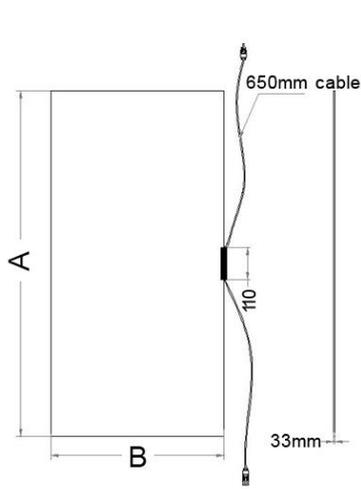


Our PV transparent thin film solar modules enable for a light to come through the window and a clear view from the inside. Different sizes of panels are available with the standard being 2'x4' with the output power of 64W.

The two powerful 12V linear actuators enable **120° tilt angles** while our locking system makes the awning securely locked during severe hurricane winds. Our special features include one of kind gasket for integrating with the existing windows, cover to conceal the electrical and mechanical of the system and much more.





**THIN FILM SOLAR PANEL SPECIFICATION RANGE**

**WARRANTY:**

-10 years materials and workmanship

-25 years power output guarantee for 90% of nominal output during first 10 years and 80% over 25 years

-View our website for detailed specs on different panel options for the windows and doors

**Electrical Specifications (performance at STC: 1000W/m<sup>2</sup>, 25°C, AM1.5)**

<b>Nominal Power(P<sub>m</sub>)</b>	64W-225W
<b>Open Circuit Voltage(V<sub>oc</sub>)</b>	60.2V-116V
<b>Short Circuit Current (I<sub>sc</sub>)</b>	0.59A-3.75A
<b>Voltage at max. Power(V<sub>m</sub>)</b>	42.6V-87V
<b>Current at max. Power(I<sub>m</sub>)</b>	0.55A-3.73A

**System Properties (at STC)**

<b>Maximum System Voltage</b>	V <sub>sys</sub> (V)	1000(600UL)
<b>Limiting Reverse Current</b>	I <sub>R</sub> (A)	2-3.5
<b>Maximum Series Fuse</b>	I <sub>CF</sub> (A)	2-3.5

**Temperature Coefficients (at STC)**

<b>Temperature Coefficients of I<sub>sc</sub></b>	α=0.060%/°C
<b>Temperature Coefficients of V<sub>oc</sub></b>	β=-0.321%/°C
<b>Temperature Coefficients of P<sub>m</sub></b>	γ=-0.214%/°C

**Mechanical Specifications**

<b>Length</b>	1200mm-3000mm
<b>Width</b>	600mm-1200mm
<b>Thickness</b>	6.8mm
<b>Area</b>	0.72m <sup>2</sup> -3.6 m <sup>2</sup>
<b>Weight</b>	11.8kg-78kg
<b>Frame</b>	Designed to application
<b>Lead Cable</b>	2.5mm <sup>2</sup> 650mm
<b>Connectors</b>	MC4

## G-P LLC SOLAR AWNING WALL MOUNTING



To make our power actuated solar awning available **for everyone**, we designed a wall mounting frame that can be **easily attached to any wall type**. With this kind of attachment the possibilities are unlimited – you can put your awning over a single window, single awning over multiple windows or multiple awnings over double windows, use it above windows as a regular solar awning or even use it where there are no windows!

## HURRICANE/STRONG WINDS LOCK

We always strive to improve security of the existing buildings, making them safer with our products. One of our important features is the hurricane/strong winds lock, that secures the awning in place, making it impervious to wind. In addition to making people safe, which is the lock primary goal, the inner window will be protected from being broken so the interior of the house/building will be habitable at all times.



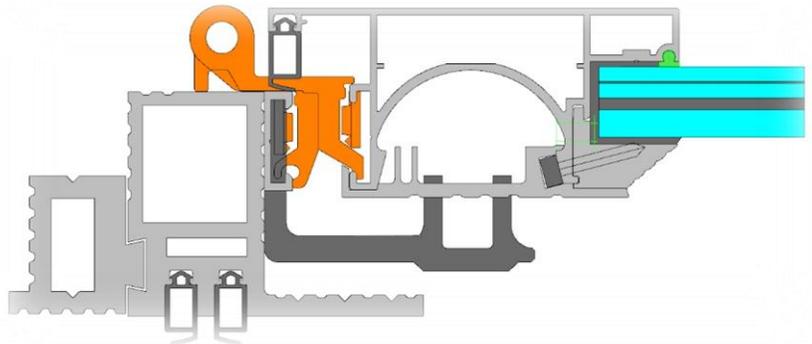
## RAIN PROTECTION

Our solar awning system comes with the rain protection rail so the water is distributed over the awning and the window doesn't come into direct contact with the water. This resolves a lot of issues that are commonly associated with the water exposure of the windows.

## G-P LLC AWNING - HURRICANE PROTECTION GLASS DESIGN

Last decade we witnessed an **increase in environmental disasters** caused by hurricanes and different types of storms, leaving millions of people around the globe without homes. One of the **weakest spots** of every home, office or any other building type are definitely **windows**. Hurricane and typhoon winds usually carry large parts of debris that must be prevented from penetrating the windows, since the wind's high pressure usually leads to roof lifting and total destruction. That is why we engineered an optional **hurricane protection glass system** with completely unique features.

Like our regular solar awning glass design it can be **integrated into one of our window** products or it can be **installed independently** as a regular awning, covering your existing windows and giving you that much needed



## HURRICANE PROTECTION GLASS DESIGN - OVERVIEW

Our protective awning system consist of multiple specially developed section parts that ensure the safety of the people inside the building. The **design is based on reinforced, multiple layered glass** with 3-4 layers of glass and up to 1" (25mm) thickness that will protect against heavy impacts. Then the **heavy duty section part** will hold the glass in place and ensure reliable connection to the rest of the awning, while the **inner cover** will be hiding the attachment points and the inner parts of the awning system.

Protective awning wall attachments design makes mounting possible and quick on virtually **any wall type**, so you can have your awning installed in no time over your existing windows. If you are planning to install new windows than we would recommend the **integrated system** with our window products.

