



# 560Wp High-Efficiency Graphene PV Module



## Features

- More Power per sq.ft.
- Less Impact On shading
- No Micro-crack Effect

## Mechanical Parameters

Length:	89.69 in.
Width:	44.65 in.
Thickness:	1.18 in.
Weight:	59.53 lbs.
Frame:	Anodized Aluminium

## Thermal Parameters

Temperature coefficient of power:	- 0.29% /K
Temperature coefficient of voltage:	- 0.25% /K
Temperature coefficient of current:	0.045% /K
Nominal operating cell temperature:	108 $\pm$ 36 $^{\circ}$ F

## Certifications & Warranty

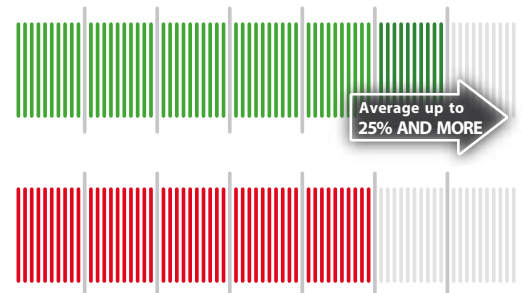
Certification:	IEC 61215
Warranty:	30 Years
PID & LID Protection:	100%
Performance Warranty:	0.2% Per Year
Fire Resistance Rating:	Type 2



### GRAPHENE



### STANDARD TECHNOLOGY





# 560Wp High-Efficiency Graphene PV Module



## Unique Features of Graphene

- Transparent (absorbs only 2.3% of light)
- Extremely strong (100–200 times stronger than steel)
- Flexible (can stretch up to 20%)
- Excellent thermal conductivity
  - approximately 5000 W/mK
- Very low electrical resistance
- Very high electron mobility (200,000 cm<sup>2</sup>/Vs)
- Incredible electron flow speed – (1/300) of the speed of light

## Mechanical Parameters

Cell:	Mono PERC 6.54 × 3.27 in
Number of Cells:	144 (6 × 24)
Module Dimensions:	69.69 × 44.65 × 1.18 in
Weight:	59.53 lbs
Coatings:	0.13 in tempered glass with AR Coating
Frame:	Anodized aluminum
Junction Box (J.Box):	IP68, 3 diodes
Cable Cross-section:	4 mm <sup>2</sup>
Cable Length:	Vertical -11.81 in; horizontal - 55.12 in
Connectors:	MC4 or MC4 - compatible

## Electrical Parameters in STC

Voltage at MPP (Vmpp):	45.15 V
Current at MPP (Impp):	12.85 A
Open-circuit voltage (Voc):	52.60 V
Short-circuit current (Isc):	13.57 A
Maximum power (Pmax):	560+ W
Graphene efficiency:	22.50%
Max. system voltage DC	1500 V

## Electrical Parameters in NOCT

Voltage at MPP (Vmpp):	41.54 V
Current at MPP (Impp):	10.52 A
Open-circuit voltage (Voc):	49.73 V
Short-circuit current (Isc):	10.91 A

## Key Benefits



- ▣ Increased strength and durability of the cells
- ▣ 30-year warranty for 94% of nominal power
- ▣ Studies have shown a maximum power loss of only 0.2% per year

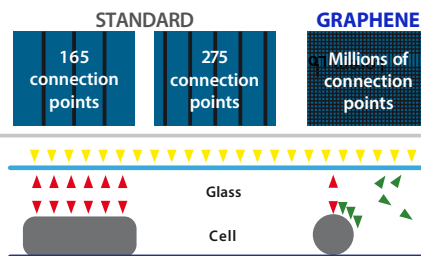


- ▣ Shorter investment payback period
- ▣ 25% higher energy production compared to standard BusBar technology
- ▣ Improved absorption of diffused sunlight



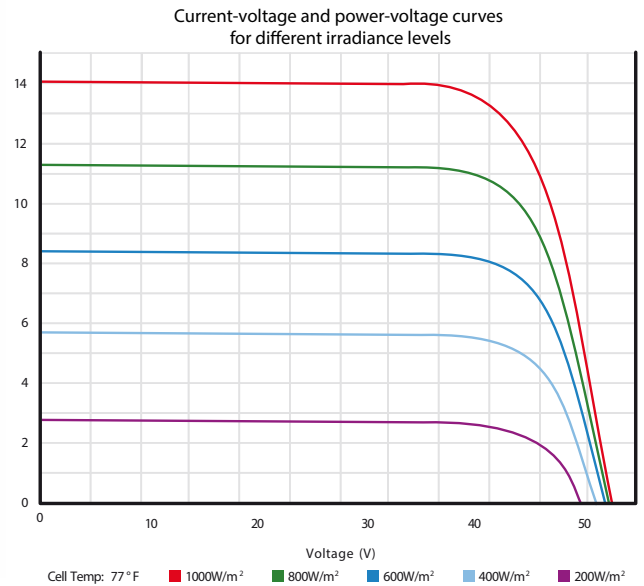
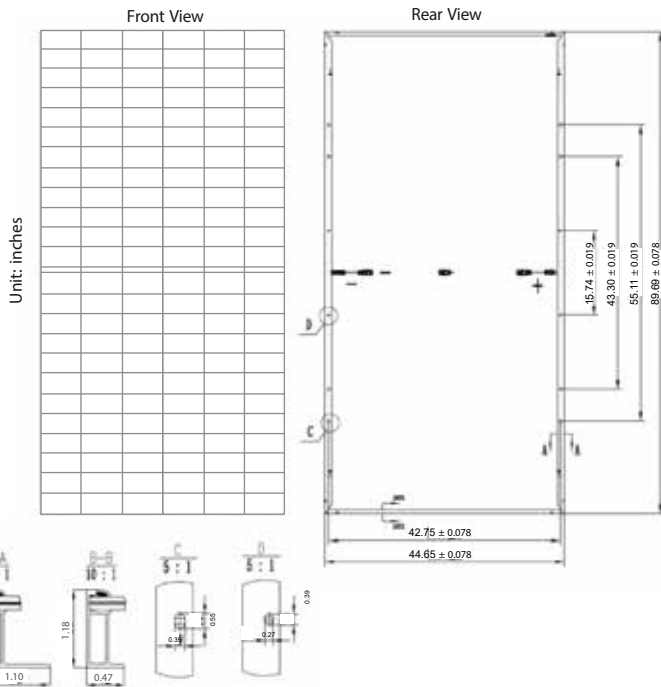
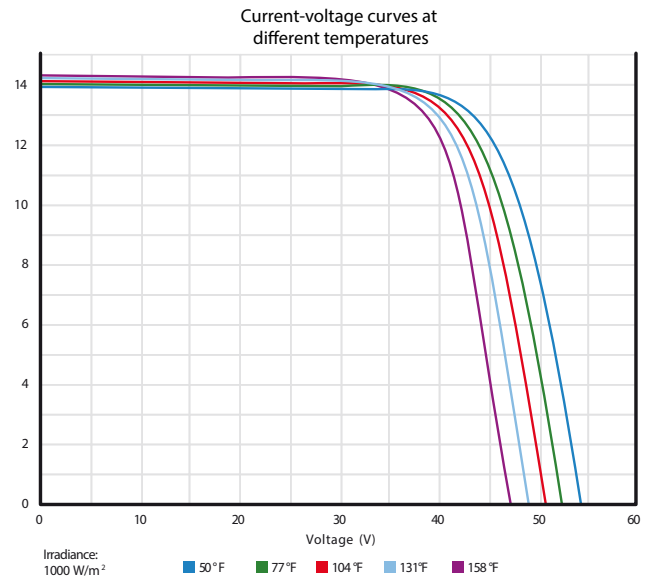
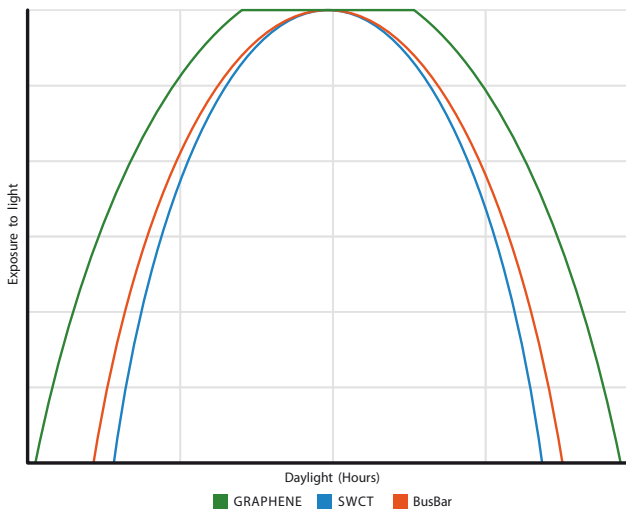
- ▣ Elimination of the impact of microcracks on module performance
- ▣ Reduced shading impact on energy yield
- ▣ Lower operating costs

## Differences in Technologies





# 560Wp High-Efficiency Graphene PV Module



We Enlighten Your Life  
 Nous Illuminons Ta Vie  
 Iluminamos Tu Vida

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