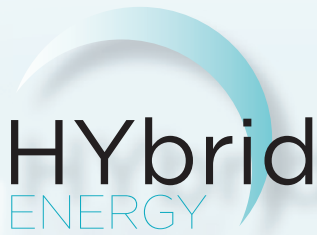


HYbrid Solar Array



Description:

- An efficient, reliable and flexible solar solution utilising Redundant Array of Integrated Solar (RAIS®) Technology
- The HYbrid Solar Array allows you to harness the natural and renewable energy of the sun. This energy feeds into your HYbrid Energy Station cleanly and simply, reducing your fuel costs, reducing your maintenance costs and increasing your efficiency.

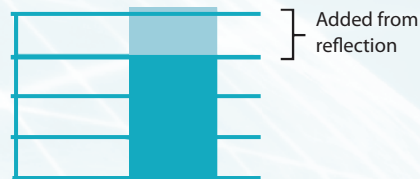
Key Benefits:

- Safely harvests reflected light
 - Unique cell optimising architecture outputs more energy per installation when utilised in HYbrid canopy PV system
- Reliable production over the module's lifetime
 - No single point of failure within the module, the unique design minimises humidity ingress and micro crack expansion
- Resilient to shading
 - Unique cell optimised design ensures output of solar module is minimally impacted by accidental shading or soiling
- Optimised output
 - Multi-level maximum power point tracking (MMPT) within module optimises output under all field conditions
- Flexible
 - Parallel design permits multiple non-coincident arrays to be combined
 - Storage ready
 - Integrated charge controller supports battery storage options without the expense or complexity of charge controllers



Wave Benefits:

30% peak power boost from reflection



More Light = More Energy

- Uses direct and reflected light
- Light-smart reflectors increases total peak power
- Reflectors turn empty space between modules into energy production
- Utilises 3M™ Cool Mirror Film Technology



Designed with roofs and equipment shading in mind:

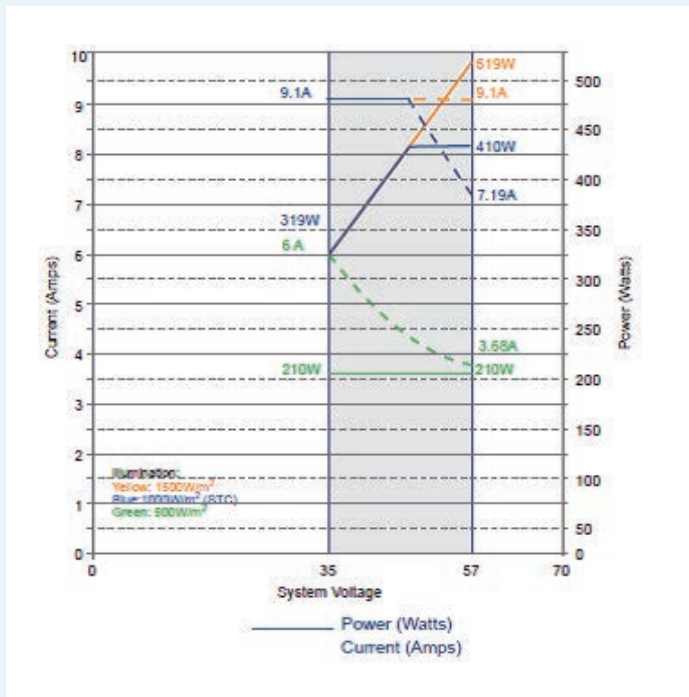
- Continuous structure requiring minimal ballast
- Meets code for wind speeds at 90mph and higher
- Keeps shaded equipment cool and UV free
- No roof penetration required
- Rail links tolerant of mounting surface variations



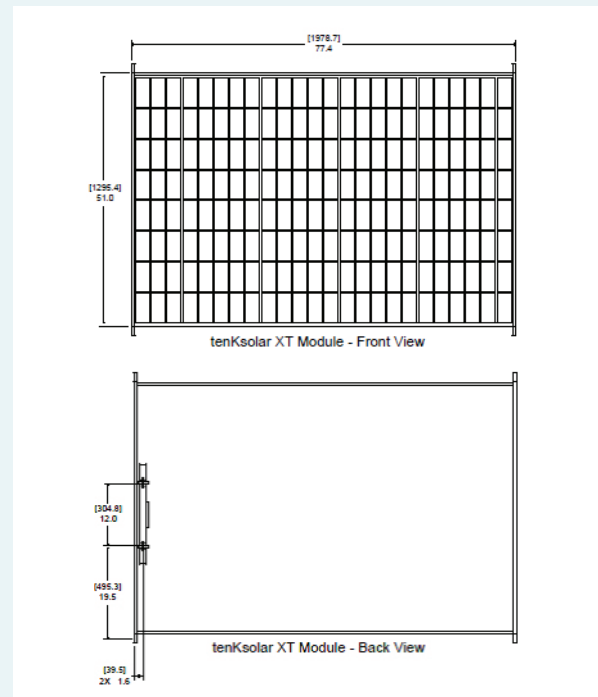
*Indicates optional equipment

HYbrid Solar Array

Typical IV Curve:



Module Dimensions:



Specifications:

Power output at STC (Pmax)	410W
Cell type	Polycrystalline silicon
Number of cells	192 half cells
Glass	3.2mm tempered glass
Maximum current output	9.1A
Maximum fuse rating	80A
Voltage	35V minimum/ 57V maximum
Ground fault detect	Integrated (compatible w/ inverter GFDI)
Internal ground fault limit	500 mA
Frame size (not including optional extensions)	1965mm x 1295mm
Frame/background	Silver/white
Backsheet material	PET covered aluminium
Bypass diodes	None
Operating temperature range	-40°C to 85°C
Module NOCT (nominal operating cell temperature)	41°C
Temperature coefficient	-0.46% /°C
Static load capacity	194 kg/m ²
Hail resistance	Direct 25mm impact at 84kph
Weight	30 kg
Certifications	UL 1703/UL 1741 pending IEC 61215 EN 61730 pending
Long Term Performance	3% power degradation first year >92% at 10 years, >85% at 25 years

*Indicates optional equipment

Datasheet issued 29 April 2013

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