

21.8%

Module efficiency
up to 21.8%

Solarbond Single Ply is a unique, lightweight solar module system, suitable for installation on flat or pitched roofs on both new build and refurbishment projects.

Individual thin film solar modules are factory laminated onto strips of PVC membrane using Solarbond's specially developed bonding technology. These composite panels, or patches, can then be hot air welded onto a single ply roof covering. No framework, screws, bolts or ballast are required.

The result is a solar array which is lightweight, efficient and cost effective and does not compromise the integrity of the main roof covering.

The standard Solarbond module is 1840 x 1040mm, with a weight of 5.7 kilos. It is bonded to a patch of 1.5mm non-embossed membrane, with a margin of typically 60-70mm around the module to allow for site welding. The bonded module as laid is around 1960 x 1160, weighing just 8.9kg or 3.9kg/m² per square metre.

Each module has its own junction boxes, with MC4 connectors supplied as standard. Modules are then connected in series across the roof, often without the need for additional cable trays or containment.

Features



Light, thin design

4.0kg/m² weight, 2.5mm thickness, match various requirements for low-load projects



Convenient installation

Easy installation and convenient transportation with lower cost



Ultra flexible

Ultra thin silicon wafers with advanced organic polymer encapsulation materials, minimum bending radius reach 0.30m, fit all kinds of curved surface perfectly



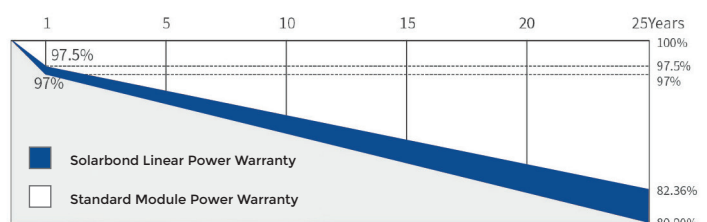
Lead free

Eco friendly PV design achieves lead free MWT module without soldering materials

Reinsurance Coverage for 25 Years



Insured by **LLOYD'S**
LLOYD'S



※1st year degradation less than 2.5%, 25 years power output 82.36% guaranteed.

Electrical Characteristics at Standard Test Conditions (STC)

Spec/Model	Unit	HNG385QHES
Max-Power(Pm)	W	366
Power Tolerance	W	
Max-Power Voltage(Vm)	V	35.7
Max-Power Current(I _m)	A	10.78
Open-Circuit Voltage(Voc)	V	43.2
Short-Circuit Current(I _{sc})	A	11.35
Module Efficiency(η _m)	%	21.8

STC: AM=1.5, Irradiation 1000W/m², Module Temperature 25°C

Electrical Characteristics at Nominal Module Operating Temperature (NMOT)

Spec/Model	Unit	HNG385QHES
Max-Power(Pm)	W	290
Max-Power Voltage(V _m)	V	33.6
Max-Power Current(I _m)	A	8.64
Open-Circuit Voltage(Voc)	V	40.7
Short-Circuit Current(I _{sc})	A	9.19

NMOT: Irradiation 800W/m², Ambient temperature 20°C, Wind Speed 1m/s

Temperature Coefficient

Nominal Module Operating Temperature	43±2°C
Temperature coefficient of P _{max}	-0.36%/°C
Temperature coefficient of V _{oc}	-0.28%/°C
Temperature coefficient of I _{sc}	0.06%/°C

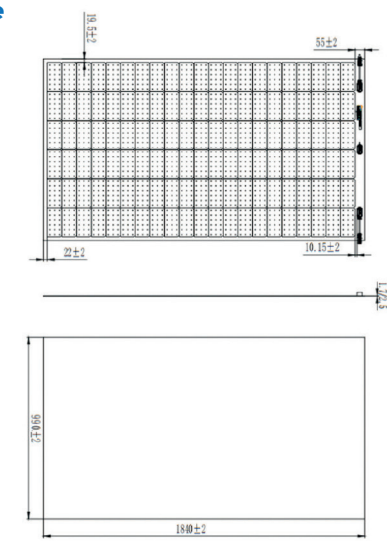
Operating Conditions

Max. system voltage	DC1500V(IEC)
Max. series fuse rating	18A
Operating temperature range	-40°C~+85°C
Connector	MC4

Mechanical Characteristics of Solar Module

Installation Module Dimension (L×W×H)	1840mmx990mmx1.7mm/2.5mm
Actual Module Dimension(L×W)	1763mmx950mm
Weight	4.9kg/6.3kg
Back material	Back Sheet(Black)
Cell (quantity / material / type / dimensions)	126(21x6) / Mono / Half-cell
Encapsulant	POE
Frame	None
Junction box(Protection degree)	IP68
Cable (length/cross-section area)	Customizable / 4mm ²
Bending radius	0.3m

Module Size



Comprehensive Qualifications & Certifications

ISO 9001: 2015 Quality Management System

ISO 14001: 2015 Environmental Management System

ISO 45001: 2018 Occupation Health Safety Management System

