



South African Modules

Local Content Compliant
Supports Local Job Creation
South African Owned
Locally Guaranteed

OUR APPROACH

ARTsolar believes high quality solar power should be produced locally at globally competitive pricing. Meticulous manufacturing, testing and quality assurance standards, TÜV certified raw materials and an in-house developed MES system ensures consistent traceable quality.

Local Support

Designed for the African climate:

- 3800pa wind & 5400pa mechanical loads
- High temperature operation
- Certified salt and ammonia resistance
- PID resistance certified by SGS
- Super high efficiency: up to 20.25%
- Quality control and traceability by PVflow

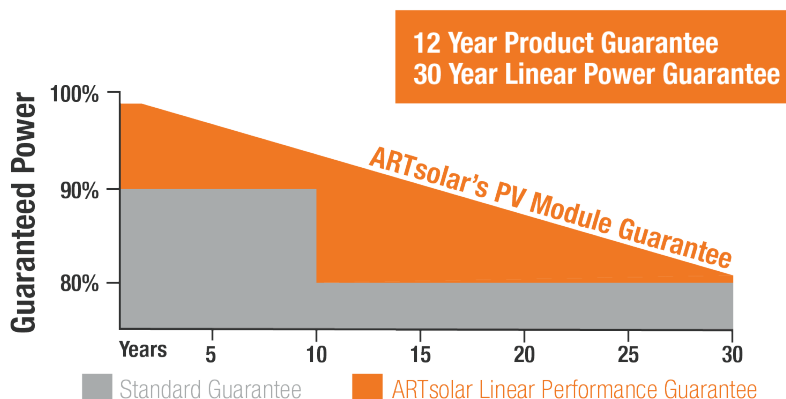
Certifications

- TÜV & SABS
- CSA, IEC61701, IEC 61215, IEC 62804,
- IEC 62716, IEC 61701, IEC 60068
- State of the ART Swiss production facility
- Earth leakage tested to 3600V DC
- Triple Electroluminescence (EL) tested
- Built for export to Europe



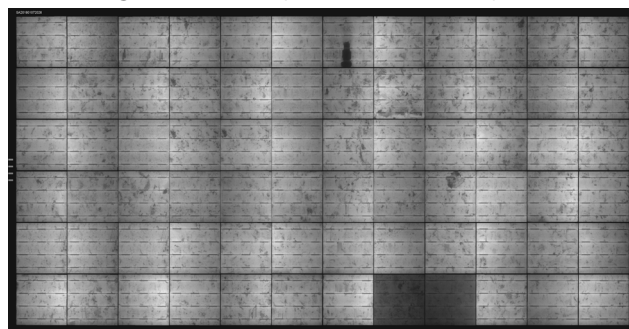
**405Wp Si-Mono PERC
Half-Cut Cell**

Locally Guaranteed



Multiple Electro-Luminescence (EL) Tested

- Multiple EL tests throughout the production line
- EL Images can be requested with each purchase



Make sure your PV module doesn't look like this. An EL looks like an X-ray which spots cracks and power loss areas invisible to the naked eye.



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MODULE DESIGN

Module Dimensions and Weights

144 Cell - 2015 x 996 x 40mm (22.7kg)

SPECIFICATIONS

Solar Cells: MBB Half-Cut, Mono Perc

Solar Glass: 3.2mm, tempered, low iron, high transparency solar safety glass with anti-reflective coating.

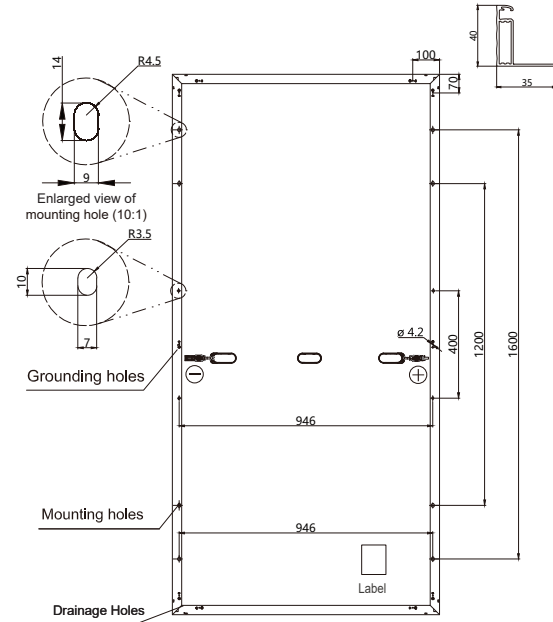
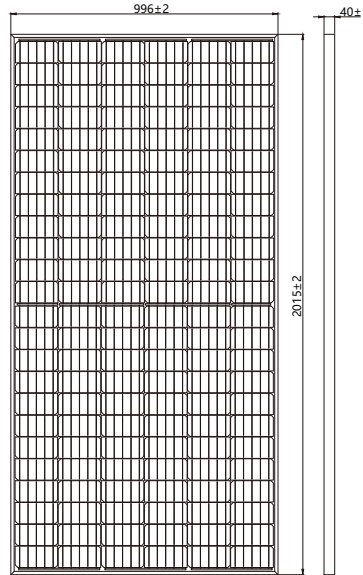
Encapsulation: EVA

Backsheet: White

Frame: Extruded, anodized aluminium

Junction Box: IP68 rated, 3 diodes, 1200mm cable, MC4 standard connectors

Units:mm



Electrical Data @ STC

Design	Pmax(Wp)	Vmp	Imp	Voc	Isc	Eff
144 Cell	405 Wp	41.5V	9.77A	49.8V	10.32A	20.20%

Electrical Data @ NOCT

Design	Pmax(wp)	Vmp	Imp	Voc	Isc
144 Cell	300 Wp	38.0V	7.88A	45.8V	8.33A

STC - Irradiance 1000 W/m², cell temp @ 25°C

NOCT - Irradiance 800 W/m², cell temp @ 20°C

KEY

Pmax(Wp) - maximum power, **Vmp** - voltage at max power, **Voc** - open circuit voltage, **Isc** - short circuit current

Imp - max power current, **Eff** - module efficiency (%)

STC - Standard Test Conditions

NOCT - Nominal Operating Cell Temperature

* Figures are typical values of performance. Slight variances do occur, exact specifications available with each module,

Temperature Ratings

Nominal Operating Cell Temp	45°C (±2°C)
Temp coefficient of Pmax	-0.350%/°C
Temp coefficient of Voc	-0.289%/°C
Temp coefficient of Isc	0.051%/°C

Maximum Ratings

Operational Temp	-40 to +85°C
Max system Voltage	1500V DC (IEC)
Max Series Fuse Rating	20A
Mechanical Load	5400pa