

### 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.

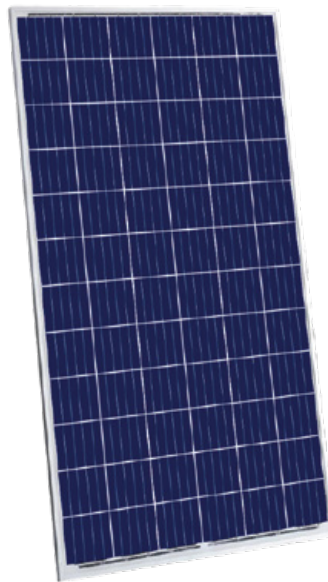
### Local Support

Designed for the African climate:

- 3800 pa wind loads, 5400 pa mechanical
- High temperature operation
- Easy module replacement
- Shipping within South Africa
- Quality control and traceability by PVflow™

### Certifications

- TÜV SÜD, ISO 9001:2008,
- CSA, IEC 61730 and IEC 61215
- State of the art Swiss production facility
- Earth leakage tested to 3600V DC
- Double Electro-Luminescence (EL) tested
- Built for export to Europe



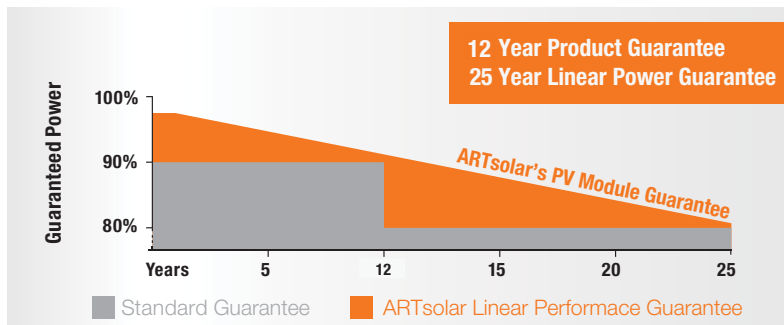
Multicrystalline 72 cell



Multicrystalline 60 cell

## Locally Guaranteed

- 12 year construction guarantee
- 25 year linear power guarantee



## Multiple Electro-Luminescence (EL) Tested

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



Make sure your module doesn't look like this. An EL is like an xray which spots cracks invisible to the human eye



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## MODULE DESIGN

### Packaging Configuration

Pallet Purchases

	72 Cell	60 Cell
Pallets	26 Modules	25 Modules
20' Container	8 Pallets	12 Pallets
40' Container	22 Pallets	28 Pallets

### KEY

' - Foot

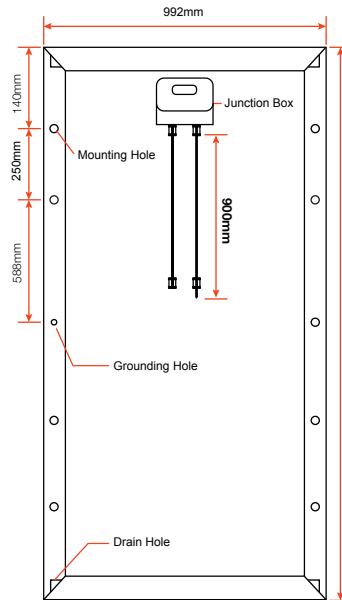
Smaller Purchases

	72 Cell	60 Cell
1 - 24 Modules	1 or 2 Module Boxes	1 or 2 Module Boxes

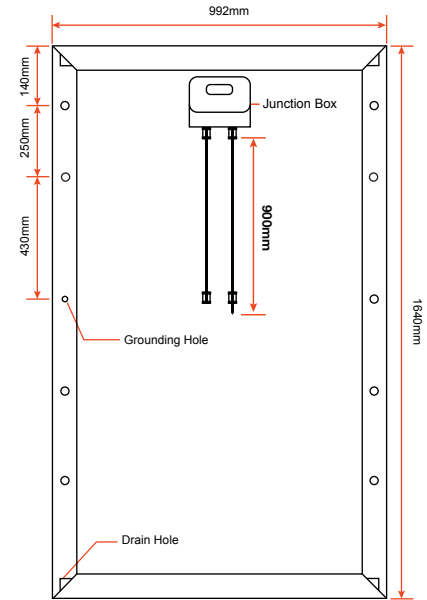
### Module Dimensions and Weights

72 Cell - 1956 x 992 x 40mm (21kg)

60 Cell - 1640 x 992 x 40mm ( 18 kg )



**72 Cell Module**



**60 Cell Module**

## SPECIFICATIONS

**Solar Cells:** 4 or 5 bus bar, multicrystalline, 156x156 mm

**Solar glass:** 3.2mm, tempered, low iron, high transparency solar safety glass

**Encapsulation:** EVA

**Backsheet:** White

**Frame:** Extruded and anodized aluminium profile

**Junction Box:** IP67 rated, cable 900mm MC4 standard connectors

Electrical Data @ STC							Electrical Data @ NOCT					
Design	Pmax(wp)	Vmp	Imp	Voc	Isc	nm	Design	Pmax(wp)	Vmp	Imp	Voc	Isc
72 Cell	320 - 335 Wp	37.5V	8.53A	46.00V	9.50A	16.5%	72 Cell	225 - 235 Wp	34.2V	6.91A	42.3V	7.45A
60 Cell	270 - 285 Wp	30.97V	8.72A	38.43V	9.31A	16.6%	60 Cell	190- 200 Wp	28.4V	7.00A	35.4V	7.53A

STC - Irradiance 1000 W/m<sup>2</sup>, cell temp @ 25°C

NOCT - Irradiance 800 W/m<sup>2</sup>, ambient 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, **nm** - module efficiency (%), **STC** - Standard test conditions

**NOCT** - Nominal operating cell temperature

\* Figures are typical values of performance. Slight variances do occur, exact specifications will be listed on each module

Temperature Ratings		Maximum Ratings	
Nominal Operating Cell Temp	45°C (±2°C)	Operational Temp	-40 to +85°C
Temp coefficient of Pmax	-0.41%/°C	Max system Voltage	1000V DC (IEC)
Temp coefficient of Voc	-0.32%/°C	Max Series Fuse Rating	15A
Temp coefficient of Isc	0.05%/°C	Mechanical Load	5400pa