ARTsolar®
LOCAL | POWERFUL | GUARANTEED

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

## OUR APPROACH

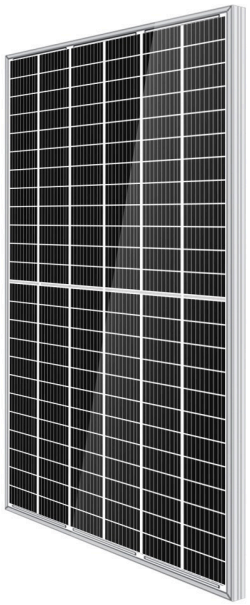
ARTsolar believes high quality solar power should be produced locally at globally competitive pricing. Meticulous manufacturing, testing and quality assurance standards, TÜV certified raw materials and an in-house developed MES system ensures consistent traceable quality.

### Local Support
Designed for the African climate:

- 3600pa 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

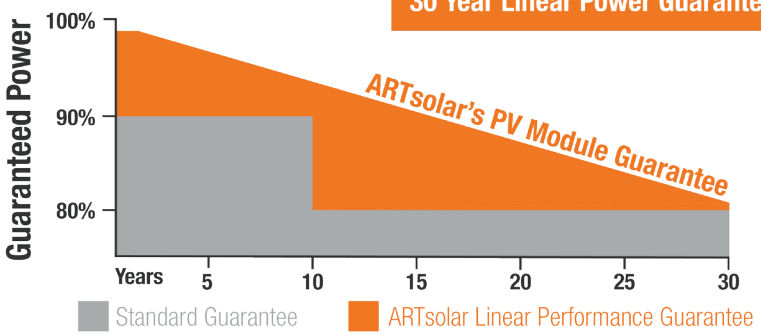
- TÜV & SABS
- CSA, IEC61701, IEC 61215, IEC 62804,
- IEC 62716, IEC 61701, IEC 60068
- State of the ART Swiss production facility
- Earth leakage tested to 3600V DC
- Triple Electroluminescence (EL) tested
- Built for export to Europe



**ART410-144-1500MH**
Half-Cut Cell Mono PERC
Solar Panel

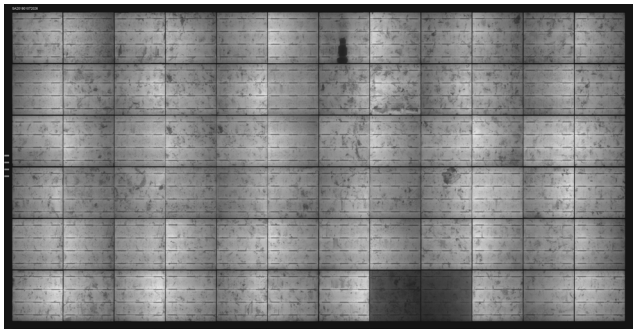
### Locally Guaranteed

**12 Year Product Guarantee**
**30 Year Linear Power Guarantee**




### 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.

Einnova Solarline
invented for solar
Powered by PVflow®

CE TÜV SÜD SABS ISO 9001

**Tel** +27 31 100 1019
**Email** sales@artsolar.net
**Web** www.artsolar.net

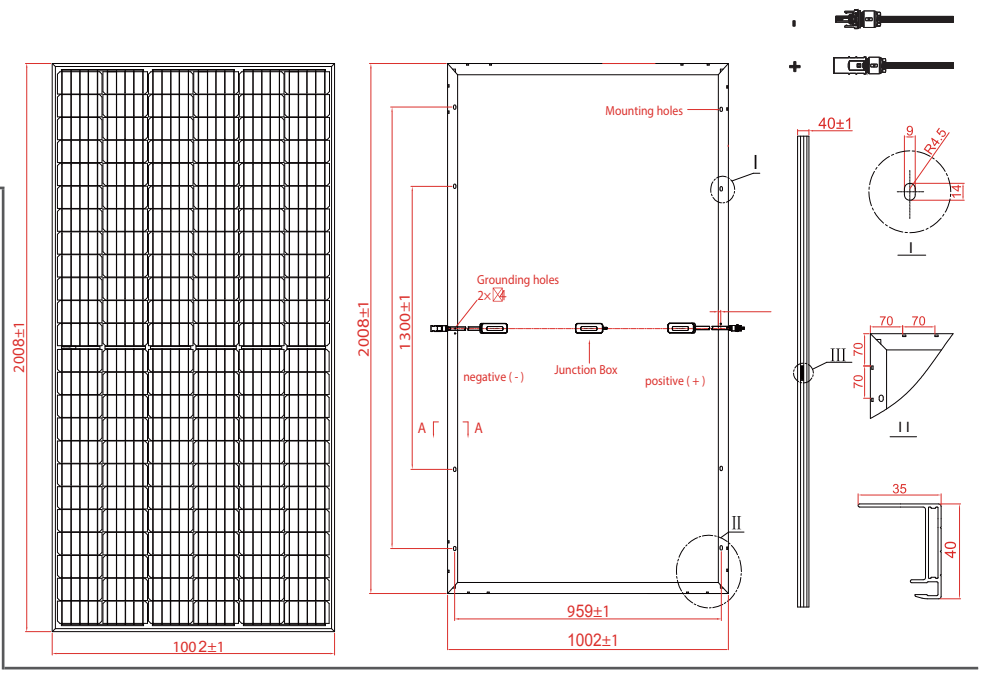
ARTsolar®
LOCAL | POWERFUL | GUARANTEED

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

## MODULE DESIGN

### Module Dimensions and Weights

**144 Cell -** 2008 x 1002 x 35 mm (21.5kg)




## SPECIFICATIONS

**Solar Cells:** 5 bus-bar, Half-Cut, Mono Perc
**Solar Glass:** 3.2mm, tempered, low iron, high transparancy solar safety glass with anti-reflective coating.
**Encapsulation:** EVA
**Backsheet:** White
**Frame:** Extruded, anodized aluminium
**Junction Box:** IP68 rated, 3 diodes, 1100mm cable, MC4 standard connectors

| Electrical Data @ STC | | | | | | |
|---|---|---|---|---|---|---|
| Design | Pmax(Wp) | Vmp | Imp | Voc | Isc | Eff |
| 144 Cell | 410 Wp | 42.0V | 9.76A | 49.5V | 10.25A | 20.25% |

| Electrical Data @ NOCT | | | | | |
|---|---|---|---|---|---|
| Design | Pmax(wp) | Vmp | Imp | Voc | Isc |
| 144 Cell | 310 Wp | 40.0V | 7.76A | 48.9V | 8.26A |

**STC -** Irradiance 1000 W/m2, cell temp @ 25°C
**NOCT -** Irradiace 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) |
| Nominal Module Operating Temp (NMOT) | 41°C (±3°C) |
| Temp coefficient of Pmax | -0.367%/°C |
| Temp coefficient of Voc | -0.320%/°C |
| Temp coefficient of Isc | 0.107%/°C |

| Maximum Ratings | |
|---|---|
| Operational Temp | -40 to +85°C |
| Max system Voltage | 1500VDC (IEC / UL) |
| Max Series Fuse Rating | 20A |
| Mechanical Load | 5400pa |

Einnova Solarline
invented for solar
Powered by PVflow®

CE TÜV SÜD SABS ISO 9001


**Tel** +27 31 100 1019
**Email** sales@artsolar.net
**Web** www.artsolar.net