

# **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.

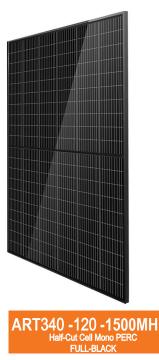
#### **Local Support**

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 20.35%
- Quality control and traceability by PVflow®

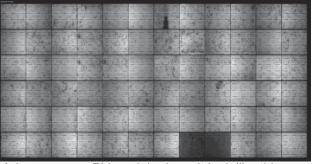
#### Certifications

- 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

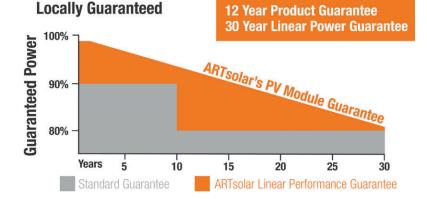


### Multiple Electro-Luminescence (EL) Tested

- 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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#### South African Modules

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

## MODULE DESIGN

### **Module Dimensions and Weights**

120 Cell - 1684 x 1002 x 35mm (20kg)

### SPECIFICATIONS

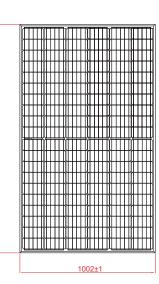
Solar Cells: MBB, Large Wafer, Half-Cut Cell Mono Percium Solar Glass: 3.2mm, tempered, low iron,

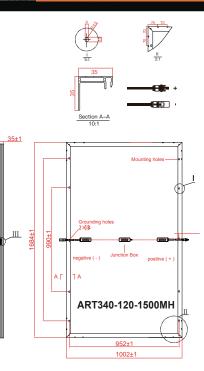
high transparency solar safety glass with anti-reflective coating.

Encapsulation: EVA Backsheet: Black Frame: Extruded, anodized aluminum

Junction Box: IP68 rated, 3 diodes,

1100mm cable, MC4 standard connectors





Electrical Data @ STC							Electrical Data @ NOCT					
Design	Pmax(Wp)	Vmp	Imp	Voc	lsc	Eff	Design	Pmax(Wp)	Vmp	Imp	Voc	lsc
120Cell	340 Wp	33.59V	10.12A	40.40V	10.70A	20.15%	120Cell	253 Wp	32.20V	7.86A	38.60V	8.86A

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

NOCT - Irradiance 800W/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		Maximum Ratings			
Nominal Operating Cell Temp	45°C (±2°C)	Operational Temp	-40 to +85°C		
Nominal Module Operating Temp (NMOT)	41°C (±3°C)	Max system Voltage	1500VDC (IEC/UL)		
Temp coefficient of Pmax	-0.35%/°C	Max Series Fuse Rating	20A		
Temp coefficient of Voc	-0.29%/°C	Mechanical Load	5400pa		
Temp coefficient of Isc	0.048%/°C				









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