

Half-Cut Cell Monocrystalline

## ART550-144

## 1500VDC

## Solar Panel

### MODULE

Design	144 CELL
Dimensions	2279 x 1134 x 35mm
Weight	28.5kg



### OUR APPROACH

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

### CERTIFICATIONS

Manufactured in line with:

SABS ISO 9001

ISO 14001

ISO 45001

IEC 61215

IEC 61730

UL 61730

CE

The IEC perscribed test with 25mm hail stones. (Speed of 23m/s)

### LOCAL SUPPORT

Designed for the African Climate

3600pa wind & 5400 pa mechanical loads

High Temperature Operation

Certified salt & ammonia resistance

PID resistance certified

High efficiency: Up to 21.50%

Earth leakage tested to 3600V DC

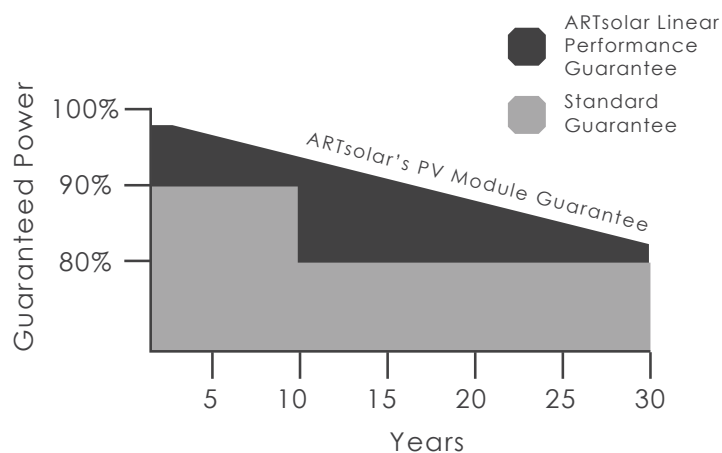
Electroluminescence (EL) tested

Quality control and traceability

### LOCALLY GUARANTEED

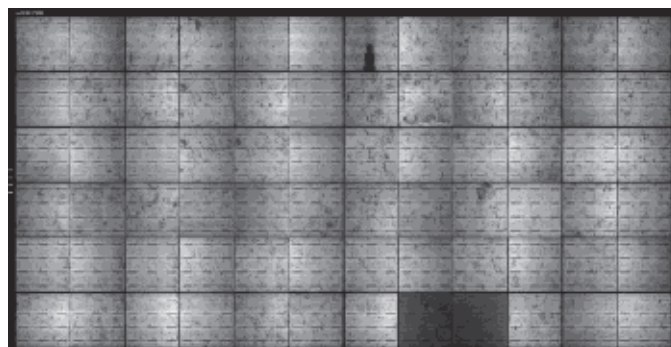
12 Year Product Guarantee

30 Year Linear Power Guarantee



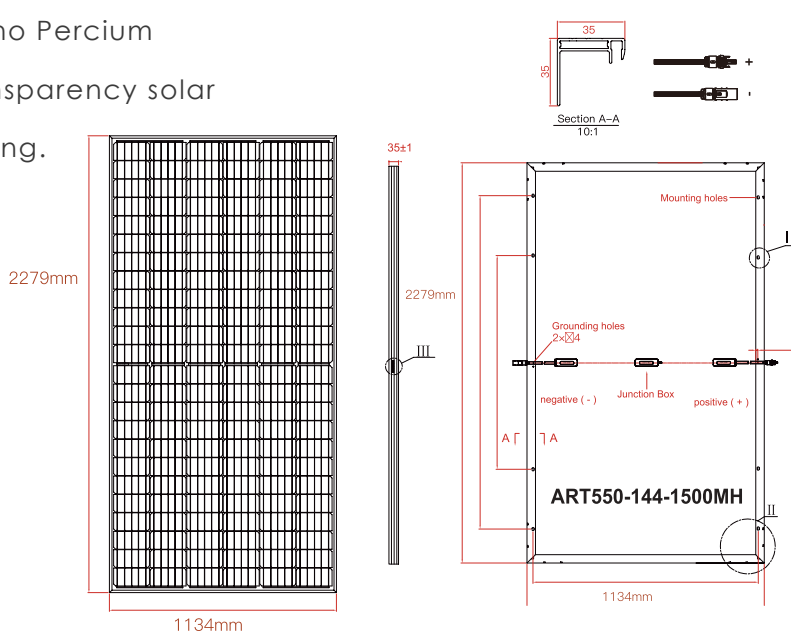
## MULTIPLE ELECTRO-LUMINESCENCE (EL) TESTED

Multiple EL tests throughout the production line  
 EL images can be requested with each purchase  
 Make sure your PV module doesn't look like the image to the right. An EL looks like an X-Ray which spots cracks and power loss areas invisible to the naked eye.



## MODULE SPECIFICATIONS

Solar Cells	MBB, Larger 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	White or Black
Frame	Extruded, anodized aluminum
Junction Box	IP68 rated, 3 diodes, 1100mm cable, MC4 standard connectors



## ELECTRICAL DATA

	STC	NOCT
Design	144 Cell	144 Cell
Pmax (Wp)	550 Wp	409 Wp
Vmp	42.00V	38.42V
Imp	13.1A	10.65A
Voc	49.85V	46.84V
Isc	13.97A	11.33A
Eff	21.3%	

**STC** - Irradiance 1000W/m<sup>2</sup>, cell temp. @ 25°C  
**NOCT** - Irradiance 800W/m<sup>2</sup>, 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

<b>Nominal Operating Cell Temp.</b>	45°C (±2°C)
<b>Nominal Module Operating Temp (NMOT)</b>	41°C (±3°C)
<b>Temp coefficient of Pmax</b>	-0.36%/°C
<b>Temp coefficient of Voc</b>	-0.26%/°C
<b>Temp coefficient of Isc</b>	-0.04%/°C

## MAXIMUM RATINGS

<b>Operational Temp</b>	-40 to +85°C
<b>Max System Voltage</b>	1500VDC (IEC/UL)
<b>Max Series Fuse Rating</b>	20A
<b>Mechanical Load</b>	5400pa