

480W | 510W

The ELITE SOLAR Half cut series is the most powered module with highest efficiency. Multibus-bar permit to reduce the degradation of the cells and increase the power generated from sun.

Feature

Durability Against Extreme Environmental Conditions



High salt mist and ammonia resistance
Certified by TUV NORD

PID Resistance



Excellent Anti-PID performance guarantee limited power degradation for mass production. (Potential Induced Degradation) under the test conditions.

High Efficiency



Higher module conversion efficiency (up to 21.00%) benefit from half cell structure (low resistance characteristic).

Low-light Performance



Advanced glass and cell surface textured design ensure excellent performance in low-light environment.

Severe Weather Resilience



Certified to withstand : Wind load (2400 pascal) and snow load (5400 pascal).



QUALIFICATIONS AND CERTIFICATES



30-year Product Warranty



30-year Linear Performance Warranty

About Elite-Solar

Engineering of elite-solar gmbH recherche and development allow to achieve the maximum efficiency. By the HC series, elite-solar are positionned at the leader on the market with innovation and commitment to the industry.

H7-480 | H7-490 | H7-500 | H7-510

Electrical Properties (STC*)

Maximum Power (Pmax)	[W]	480	490	500	510
MPP Voltage (Vmpp)	[V]	37.65	37.97	38.29	38.61
MPP Current (Impp)	[A]	12.75	12.90	13.06	13.21
Open Circuit Voltage (Voc)	[V]	45.07	45.37	45.67	45.97
Short Circuit Current (Isc)	[A]	13.65	13.79	13.93	14.07
Module Efficiency	[%]	20.21	20.64	21.06	21.32
Operating Temperature	[°C]	-40~ +85			
Maximum System Voltage	[V]	VDC 1500			
Maximum Series Fuse Rating	[A]	25			
Number of Bypass Diodes		3			
Power Tolerance	[%]	0~ +5			

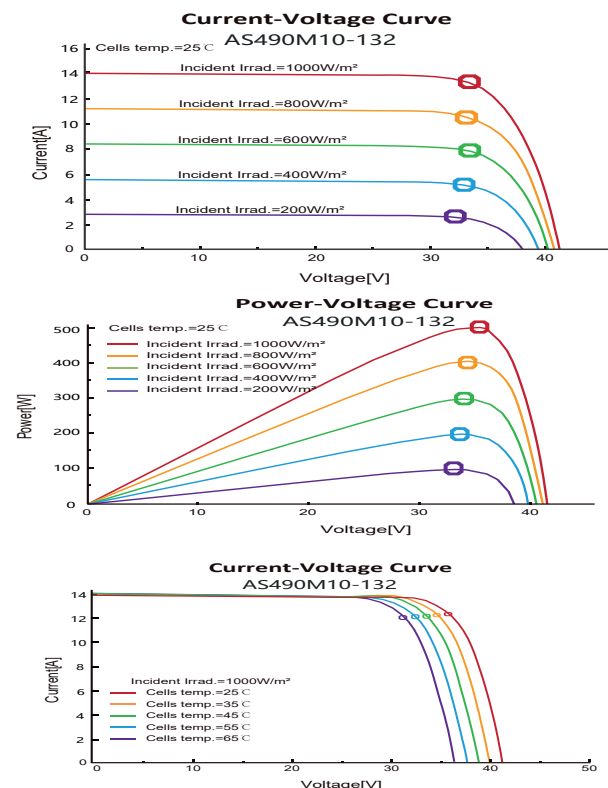
The nameplate power output is measured and determined by elite-solar at its sole and absolute direction.
 * STC (Standard Test Condition): Irradiance 1.000W/m², cell temperature 25°C, AM 1.5 (Measurement Tolerance ± 3%, Electrical Parameter Tolerance: ± 5%)

Mechanical Properties

Cells	6 x 22
Cell Type	Monocrystalline
Cell Dimensions	182x 91 mm
Number of Busbar	9 (Multi Wire Busbar)
Dimensions (L x W x H)	2094 ± 2mm x 1134 ± 2mm x 30mm ± 1mm
Front Load	5,400 Pa
Back Load	2,400 Pa
Weight	24.4 kg
Connector Type	MC4 Compatible
Junction Box	Split Junction Box (IP68 ,three diode)
Cables	4.0mm ² , +1200mm, -1200mm Customized Length
Glass	Class II
Frame	Anodised Aluminium / Black anodised optional

* Please refer to the installation manual for the details

Characteristic Curves



Electrical Properties (NOCT*)

Maximum Power	[W]	361.6	369.1	376.7	406.8
MPP Voltage	[V]	42.17	42.45	42.73	38.36
MPP Current (Impp)	[A]	11.02	11.13	11.24	10.60
Open Circuit Voltage	[V]	34.62	34.98	35.34	46.40
Short Circuit Current	[A]	10.44	10.55	10.66	11.19

* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², ambient temperature 20°C, wind speed 1 m/s

Temperature Characteristics

Normal Operating Cell Temperature (Noct)	[°C]	45±2
Temperature Coefficient Of Pmax	[%/°C]	-0.350
Temperature Coefficient Of Voc	[%/°C]	-0.275
Temperature Coefficient Of Isc	[%/°C]	0.045

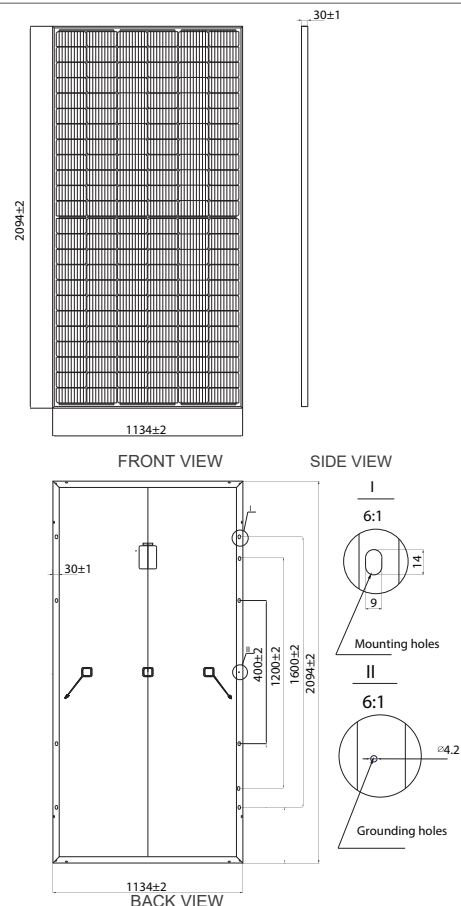
Certifications and Warranty

Certifications	UL 1703
	IEC 61215, IEC 61730-1/-2
	IEC 61701 SALT Corrosion
	IEC 62716 AMONIA Corrosion
	ISO 9001

Product Warranty	30 Years
Output Warranty of Pmax	Linear Warranty*

* 1) 1st year: 98%, 2) After 1st year: 0.5% annual degradation, 3) 80% for 30 years

Dimensions (mm)



* The distance between the center of the mounting/grounding holes.