

# 580W | 610W

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 21.60%) 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



## About Elite-Solar

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

H7-580 | H7-585 | H7-590 | H7-595 | H7-600 | H7-605 | H7-610

### Electrical Properties (STC\*)

Maximum Power (Pmax)	[W]	580	585	590	595	600	605	610
MPP Voltage (Vmpp)	[V]	34.10	34.30	34.50	34.70	34.90	35.10	35.30
MPP Current (Impp)	[A]	17.02	17.06	17.11	17.15	17.20	17.25	17.29
Open Circuit Voltage (Voc)	[V]	40.50	40.70	40.90	41.10	41.30	41.50	41.70
Short Circuit Current (Isc)	[A]	18.27	18.32	18.37	18.42	18.47	18.52	18.57
Module Efficiency	[%]	20.50	20.70	20.80	21.00	21.20	21.40	21.60
Operating Temperature	[°C]	-40~+85						
Maximum System Voltage	[V]	VDC 1500						
Maximum Series Fuse Rating	[A]	30						
Number of Bypass Diodes		3						
Power Tolerance	[W]	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/m<sup>2</sup>, cell temperature 25°C, AM 1.5 (Measurement Tolerance ± 3%).

### Mechanical Properties

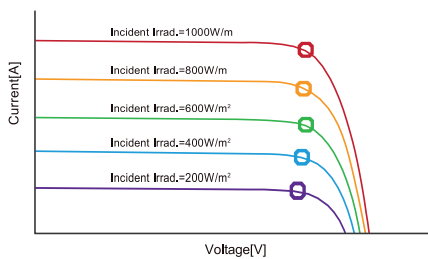
Cells	6 x 20
Cell Type	Monocrystalline
Cell Dimensions	210 x 105 mm
Number of Busbar	12 (Multi Wire Busbar)
Dimensions (L x W x H)	2172 ± 2 x 1303 ± 2 x 35mm ± 1
Max StaticLoad Front	5 400 Pa
Max StaticLoad, Back	2 400 Pa
Weight	30.9 kg ± 3%
Connector Type	MC4 Compatible
Junction Box	P68, three diode
Cables	4.0mm <sup>2</sup> , +300mm, -300mm Customized Length
Glass	3.2mm Tempered Low Iron Glass
Frame	Anodised Aluminium / Black anodised optional

\* Please refer to the installation manual for the details

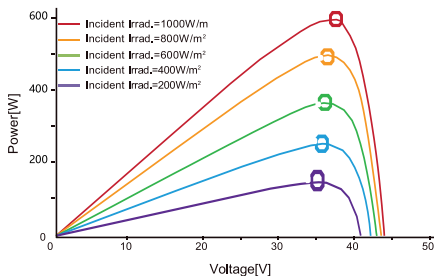
### Characteristic Curves

#### I-V Curves for H7-595 at different Irradiances

Cell Temp : 25°C



#### Power-Voltage curve



### Electrical Properties (NOCT\*)

Maximum Power	[W]	435.2	438.9	442.7	446.4	450.2	453.9	457.7
MPP Voltage	[V]	31.80	32.00	32.20	32.40	32.60	32.80	32.90
MPP Current (Impp)	[A]	13.67	13.71	13.74	13.78	13.82	13.86	13.89
Open Circuit Voltage	[V]	38.00	38.20	38.40	38.60	38.80	38.90	39.10
Short Circuit Current	[A]	14.76	14.80	14.84	14.88	14.92	14.96	15.30

\* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup> ambient temperature 20°C, wind speed 1 m/s

### Temperature Characteristics

Normal Operating Cell Temperature(Noct)	[°C]	43±2°C
Temperature Coefficient Of Pmax	[%/°C]	- 0.340%/°C
Temperature Coefficient Of Voc	[%/°C]	- 0.250%/°C
Temperature Coefficient Of Isc	[%/°C]	+ 0.040%/°C

### Certifications and Warranty

Certifications	IEC 61215, IEC 61730, IEC 62804
	IEC 61701 SALT Corrosion
	IEC 62716 AMONIA Corrosion
	ISO 9001, ISO 14001

Product Warranty	15 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)

