

# 30 years warranty

BLACK EDITION

### 380W | 420W

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 charcteristic).

### Low-light Performance



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

### Severe Weather Resilience

30-year Product Warranty



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

## DEUTSCHE QUALITAT

### QUALIFICATIONS AND CERTIFICATES











Enginering 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.



30-year Linear Performance Warranty



# es elite solar

### H7-380 | H7-390 | H7-400 | H7-410 | H7-420

### Electrical Properties (STC\*)

Maximum Power (Pmax)	[W]	380	390	400	410	420
MPP Voltage (Vmpp)	[V]	30.56	30.88	31.20	31.52	31.82
MPP Current (Impp)	[A]	12.43	12.63	12.82	13.01	13.20
Open Circuit Voltage (Voc)	[V]	36.31	36.61	36.91	37.21	37.22
Short Circuit Current (Isc)	[A]	13.40	13.54	13.68	13.82	13.85
Module Efficiency	[%]	19.46	19.97	20.48	21.00	21.50
Operating Temperature	[°C]	-40~ +85				
Maximum System Voltage	[V]	VDC 1500				
Maximum Series Fuse Rating	[A]	25				
Number of Bypass Diodes		3				
Power Tolerance	[W]	0~+5				

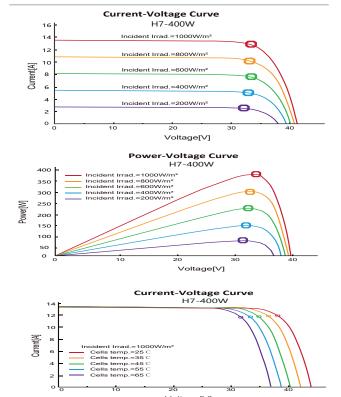
The nameplate power output is measured and determined by elite-solar at its sole and absolute direction

### **Mechanical Properties**

Cells	6×18
Cell Type	Monocrystalline
Cell Dimensions	182 x 91 mm
Number of Busbar	10 (Multi Wire Busbar)
Dimensions (L x W x H)	1722 ±2 × 1134 ±2 × 30mm ±1
Max StaticLoad Front	5 400 Pa
Max StaticLoad, Back	2 400 Pa
Weight	21.0 kg ± 3%
Connector Type	MC4 Compatible
Junction Box	P68 ,three diode
Cables	4.0mm²,+1 200mm,-1 200mm Customized Length
Glass	3.2mm Tempered Low Iron Glass
Frame	Anodised Aluminium / Black anodised optional

<sup>\*</sup> Please refer to the installation manual for the details

### Characteristic Curves



### Electrical Properties (NOCT\*)

Maximum Power	[W]	286.3	293.8	301.3	308.9	316.4
MPP Voltage	[V]	27.92	28.36	28.79	29.21	29.62
MPP Current (Impp)	[A]	10.25	10.36	10.47	10.57	10.68
Open Circuit Voltage	[V]	33.97	34.25	34.53	34.81	35.09
Short Circuit Current	[A]	10.82	10.93	11.04	11.16	11.27

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

### Temperature Characteristics

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

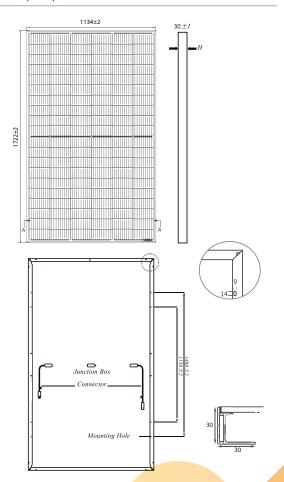
### Certifications and Warranty

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

Product Warranty	30 Years
Output Warranty of Pmax	Linear Warranty*

<sup>\* 1) 1</sup>st year: 98%, 2) After 1st year: 0.5% annual degradation, 3) 80% for 30 years

#### Dimensions (mm)





<sup>\*</sup> STC (Standard Test Condition): Irradiance 1.000W/m², cell temperature 25°C, AM 1.5 (Measurement Tolerance  $\pm$  3%).