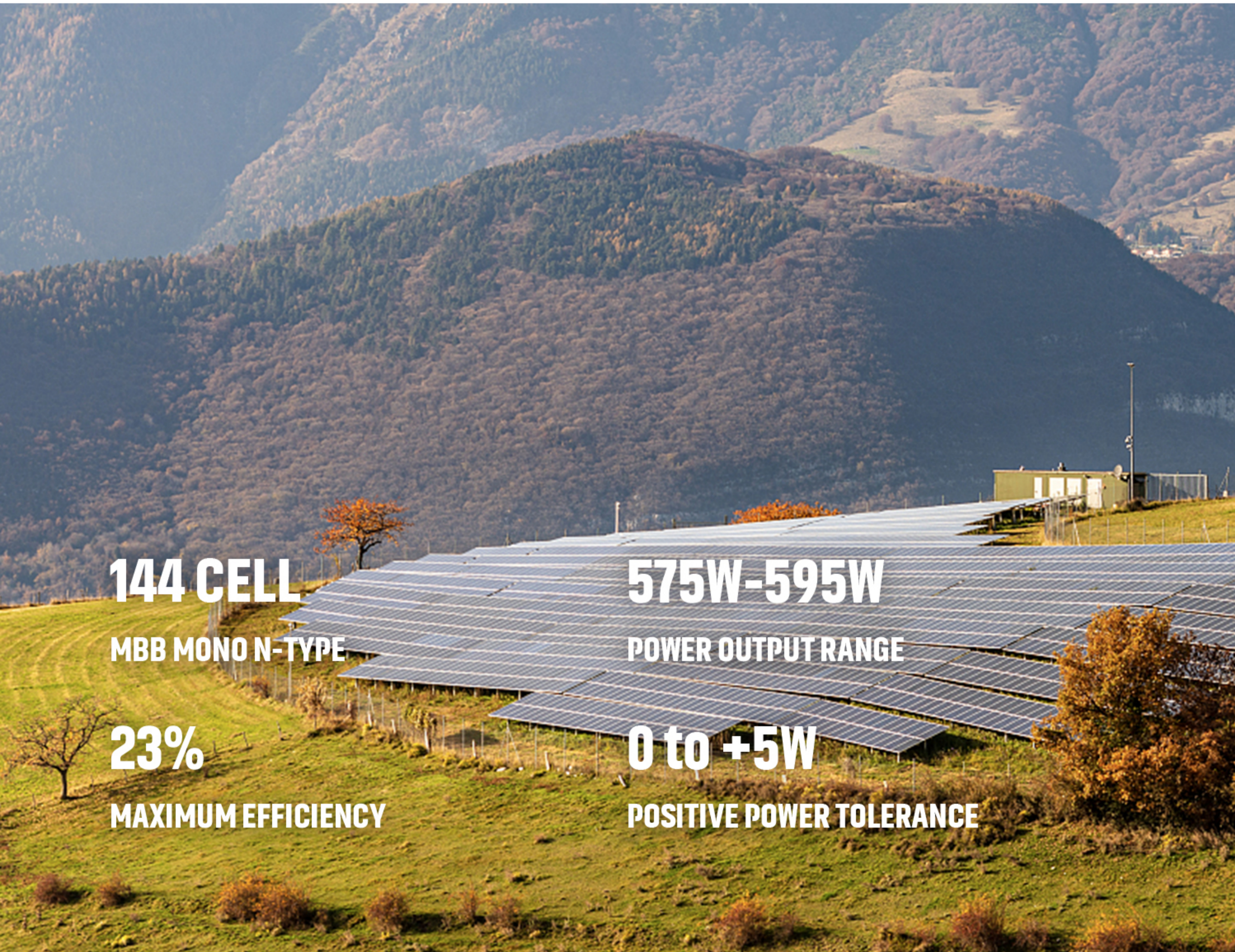
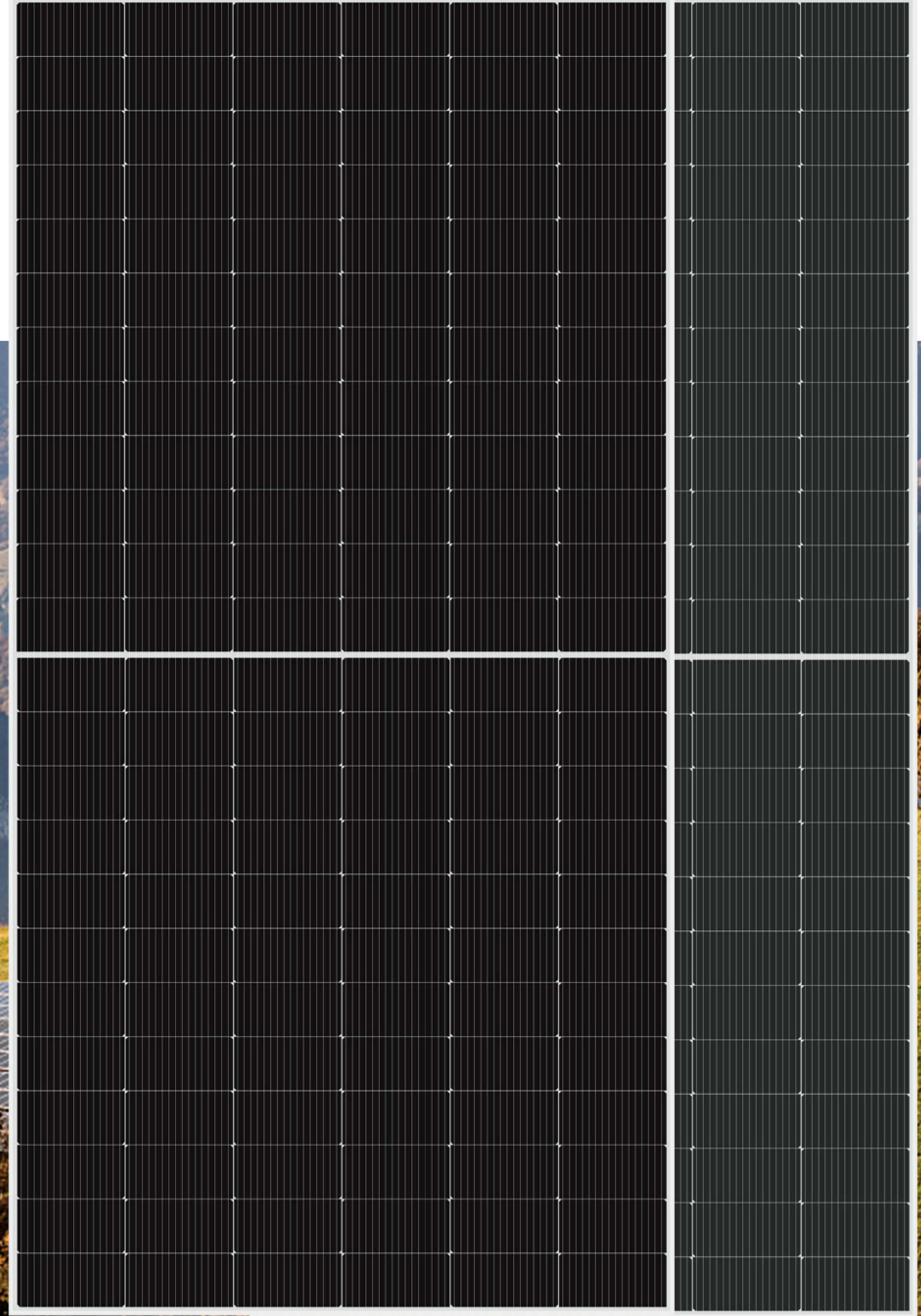


GERMAN BRAND SOLAR PANEL  
BIFACIAL TRANSPARENT BACKSHEET  
N-TYPE M10 HALF CELL MONO

# 595W



**144 CELL**

MBB MONO N-TYPE

**23%**

MAXIMUM EFFICIENCY

**575W-595W**

POWER OUTPUT RANGE

**0 to +5W**

POSITIVE POWER TOLERANCE



### Higher Output of Power

Effectively reduce the unit cost of PV solar system by watt



### Optimize the temperature coefficient

Improve the performance under the condition of shadow and low temperature coefficient



### Reduce the shadow loss on the power output

Effectively reduce the risk of heat spot on high efficiency



### Stronger the physical property

Optimize the property of power generating and reliability of the system

Module Type		HTS-144M10H575L		HTS-144M10H580L		HTS-144M10H585L		HTS-144M10H590L		HTS-144M10H595L	
		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Test Environment		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power	P <sub>MAX</sub> (W)	575	435.2	580	438.9	585	442.6	590	446.3	595	450
Maximum Power Voltage	V <sub>MPP</sub> (V)	44.83	43.15	45.04	43.34	45.25	43.53	45.46	43.72	45.67	43.91
Maximum Power Current	I <sub>MPP</sub> (A)	12.83	10.08	12.88	10.12	12.93	10.16	12.98	10.2	13.03	10.24
Open Circuit Voltage	V <sub>OC</sub> (V)	52.6	50.03	52.8	50.22	53	50.41	53.2	50.6	53.4	50.79
Short Circuit Current	I <sub>SC</sub> (A)	13.46	10.59	13.5	10.63	13.54	10.67	13.58	10.71	13.62	10.75
Tolerance	(W)	0 - +5		0 - +5		0 - +5		0 - +5		0 - +5	
Module Efficiency	(%)	22.3		22.5		22.6		22.8		23	

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.

Average efficiency reduction of 4.5% at 200W/m<sup>2</sup> according to EN 60904-1

NOCT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.

**BIFACIAL OUTPUT-REAR SIDE POWER GAIN 10% FOR REFERENCE**

Module Type	HTS-144M10H565L	HTS-144M10H570L	HTS-144M10H575L	HTS-144M10H580L	HTS-144M10H585L
P <sub>max</sub> (W)	621.5	627	632.5	638	643.5
V <sub>oc</sub> (V)	52.2	52.4	52.6	52.8	53
I <sub>sc</sub> (A)	14.78	14.84	14.9	14.9	15.02
V <sub>mp</sub> (V)	44.43	44.63	44.83	45.04	45.25
I <sub>mp</sub> (A)	13.99	14.05	14.11	14.17	14.22

**MECHANICAL DATA**

Solar Cells	Mono N-TYPE
Cell Orientation	144 (6 x 24)
Module Dimensions	2278 x 1134 x 30mm
Weight	27kg
Glass	Anti-Reflective, AR Coated and Heat Tempered Solar Glass-3.2mm
Backsheet	Transparent
Frame	Anodized Aluminium Alloy
J-Box	IP 68 Rated
Cables	4.0mm <sup>2</sup> , 350mm or Customized Length
Connector	MC4 Compatible

**TEMPERATURE RATINGS**

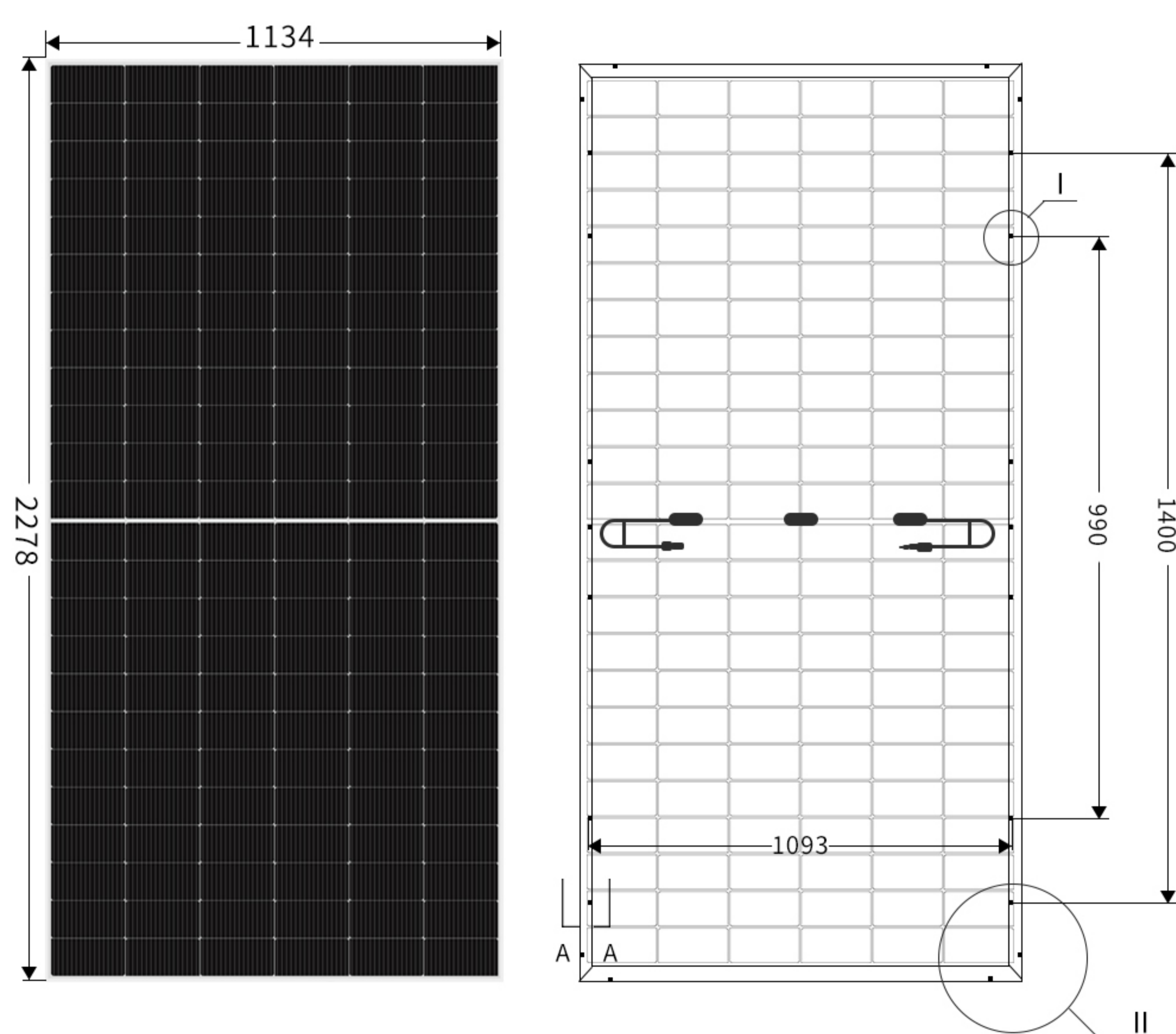
Nominal Operating Cell Temperature(NOCT)	45±2°C
Temperature Coefficient of P <sub>MAX</sub>	-0.30%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.25%/°C
Temperature Coefficient of I <sub>sc</sub>	+0.046%/°C

**MAXIMUM RATINGS**

Operational Temperature	-40°C to +85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	30A
Mechanical Load	5400pa
Wind Load	2400pa

<b>PACKAGE</b>	Modules per Pallet: 37 pieces	Modules per 40'HQ Container: 740 pieces
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**DIMENSIONS OF PV MODULE**



**LINEAR PERFORMANCE WARRANTY**

15 Year Product Warranty 30 Year Linear Power Warranty

