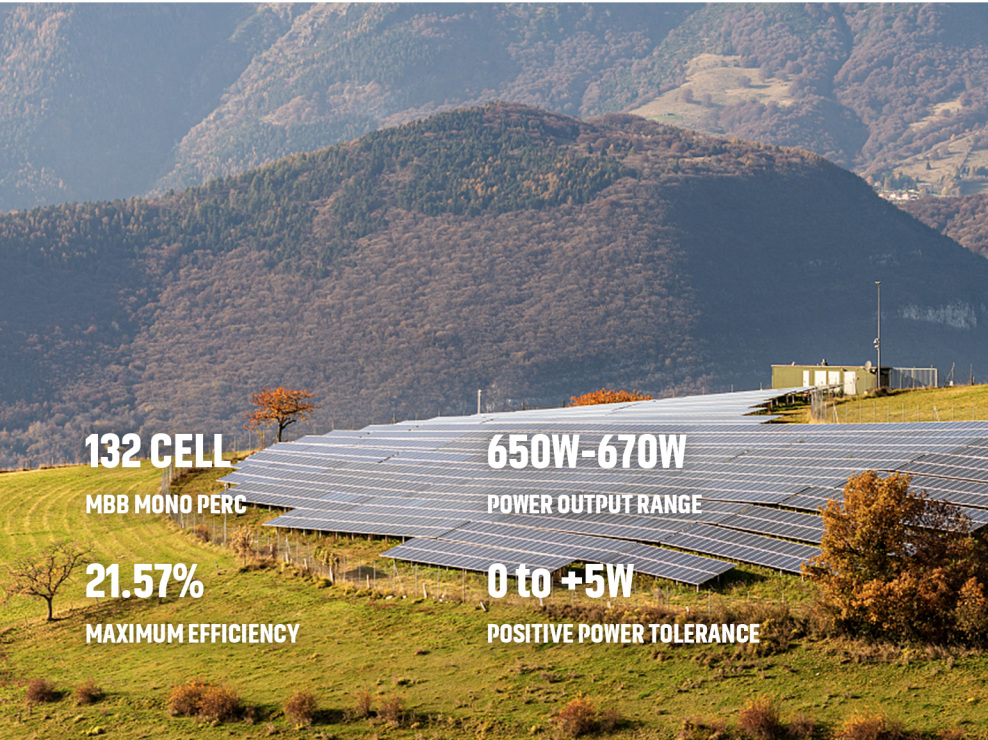


GERMAN BRAND SOLAR PANEL  
G12 HALF CELL MONO

# 670W



**132 CELL**  
MBB MONO PERC

**21.57%**  
MAXIMUM EFFICIENCY

**650W-670W**  
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-132G12H650		HTS-132G12H655		HTS-132G12H660		HTS-132G12H665		HTS-132G12H670	
		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Test Environment		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power	$P_{MAX}(W)$	650	492.07	655	495.85	660	499.64	665	503.42	670	507.21
Maximum Power Voltage	$V_{MPP}(V)$	36.79	34.24	37.00	34.43	37.21	34.63	37.42	34.82	37.63	35.02
Maximum Power Current	$I_{MPP}(A)$	17.67	14.37	17.71	14.40	17.74	14.42	17.78	14.46	17.81	14.48
Open Circuit Voltage	$V_{oc}(V)$	44.34	41.79	44.59	42.03	44.85	42.26	45.10	42.50	45.35	42.74
Short Circuit Current	$I_{sc}(A)$	18.76	15.11	18.80	15.15	18.84	15.17	18.88	15.21	18.91	15.23
Tolerance	(W)	0 - +5		0 - +5		0 - +5		0 - +5		0 - +5	
Module Efficiency	(%)	20.93		21.09		21.25		21.41		21.57	

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.

**MECHANICAL DATA**

Solar Cells	Mono PERC
Cell Orientation	132 (6 x 22)
Module Dimensions	2384 x 1303 x 35mm
Weight	33.5kg
Glass	Anti-Reflective, AR Coated and Heat Tempered Solar Glass-3.2mm
Backsheet	White
Frame	Anodized Aluminium Alloy
J-Box	IP 68 Rated
Cables	4.0mm <sup>2</sup> , 350mm or Customized Length
Connector	MC4 Compatible
<b>PACKAGE</b>	Modules per box:31 pieces                      Modules per 40' container:558 pieces

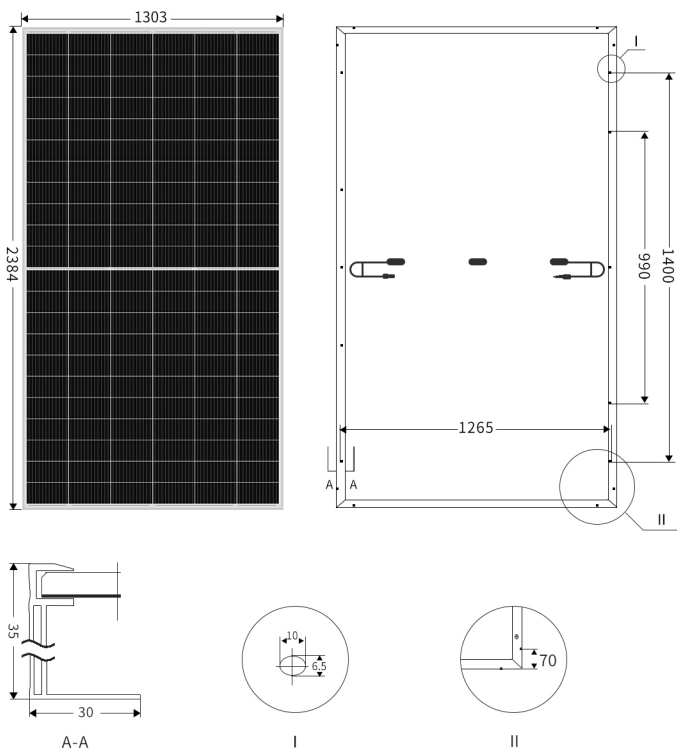
**TEMPERATURE RATINGS**

Nominal Operating Cell Temperature(NOCT)	45±2°C
Temperature Coefficient of $P_{MAX}$	-0.35%/°C
Temperature Coefficient of $V_{oc}$	-0.28%/°C
Temperature Coefficient of $I_{sc}$	+0.048%/°C

**MAXIMUM RATINGS**

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

**DIMENSIONS OF PV MODULE**



**LINEAR PERFORMANCE WARRANTY**

15 Year Product Warranty

30 Year Linear Power Warranty

