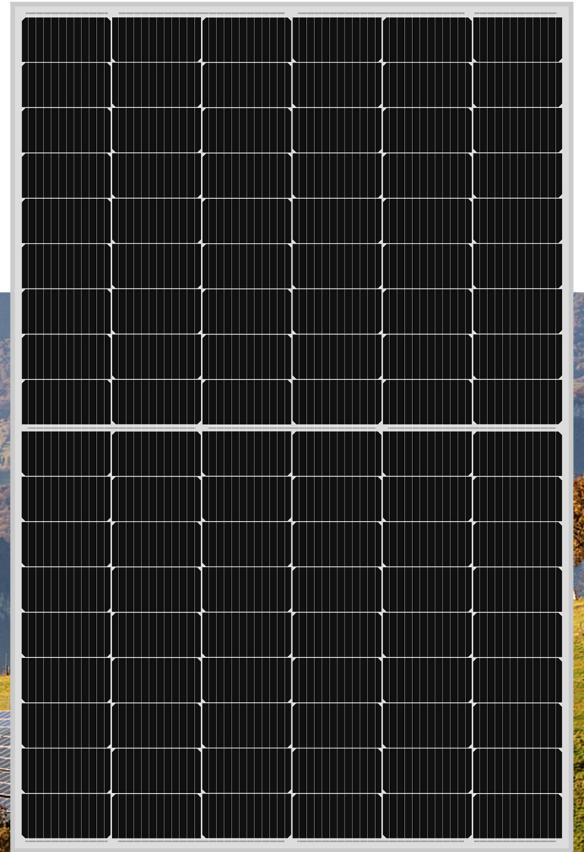


GERMAN BRAND SOLAR PANEL  
M10 HALF CELL MONO

# 420W



**108 CELL**  
M10 MBB MONO PERC

**21.51%**  
MAXIMUM EFFICIENCY

**400W-420W**  
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-108M10H400		HTS-108M10H405		HTS-108M10H410		HTS-108M10H415		HTS-108M10H420	
		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Test Environment		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power	$P_{MAX}(W)$	400	298	405	301	410	305	415	309	420	312
Maximum Power Voltage	$V_{MPP}(V)$	30.42	28.42	30.52	28.56	30.62	28.72	30.79	28.88	30.91	29.01
Maximum Power Current	$I_{MPP}(A)$	13.15	10.47	13.27	10.55	13.39	10.62	13.48	10.69	13.59	10.76
Open Circuit Voltage	$V_{oc}(V)$	36.98	34.90	37.06	34.98	37.14	35.05	37.31	35.21	37.43	35.39
Short Circuit Current	$I_{sc}(A)$	13.78	11.13	13.85	11.19	13.92	11.24	14.01	11.32	14.12	11.38
Tolerance	(W)	0 - +5		0 - +5		0 - +5		0 - +5		0 - +5	
Module Efficiency	(%)	20.48		20.74		21.00		21.25		21.51	

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	108 (6 x 18)
Module Dimensions	1722 x 1134 x 30mm
Weight	20kg
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

**PACKAGE**      Modules per box: 36 pieces      Modules per 40' container: 936 pieces

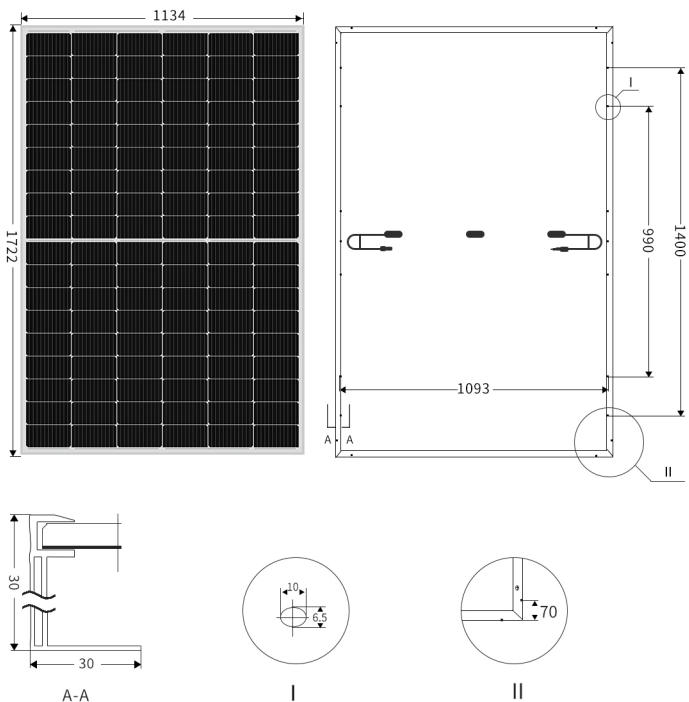
**TEMPERATURE RATINGS**

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	25A
Mechanical Load	5400pa
Wind Load	2400pa

**DIMENSIONS OF PV MODULE**



**LINEAR PERFORMANCE WARRANTY**

**15** Year Product Warranty  
**30** Year Linear Power Warranty

