



### Einführung

Zusammengesetzt mit 11BB PERC-Zellen bietet die Halbzellenkonfiguration der Module die Vorteile einer höheren Leistungsabgabe, einer besseren temperaturabhängigen Leistung, einer geringeren Abschattung der Energieerzeugung, eines geringeren Risikos von Hotspots sowie einer verbesserten Toleranz gegenüber mechanischen Belastungen.



höhere Ausgangsleistung



niedrigere Stromgestehungskosten (Levelized-Cost of Electricity)



höhere Energieerzeugung bei Abschattung und geringerer Widerstandsverlust

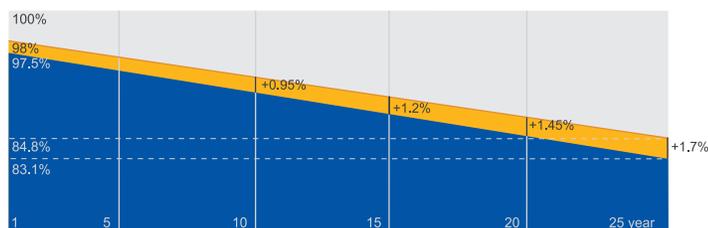


Bessere mechanische Belastbarkeit

### ausgezeichnete Garantie

- 12 Jahre Produktgarantie
- 25 Jahre Garantie auf konstante Leistung

0.55% Annual Degradation Over 25 years



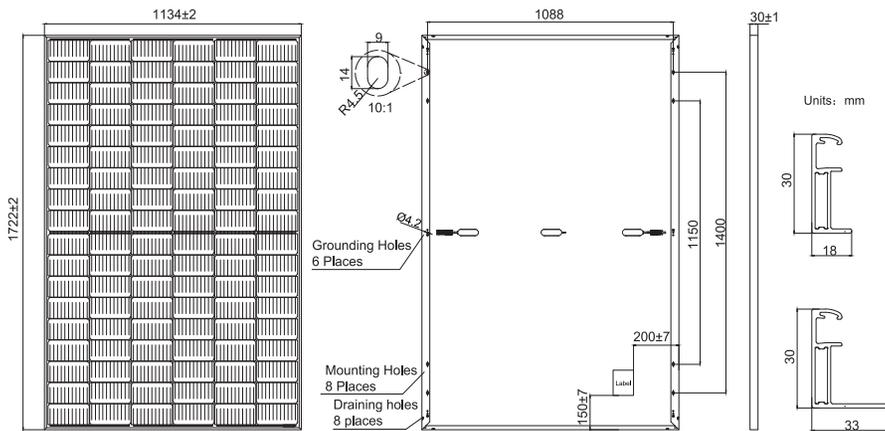
■ Neue Garantie auf konstante Leistung ■ Standard Modul Garantie auf konstante Leistung

### Umfassende Zertifikate

- IEC 61215, IEC 61730, UL 61215, UL 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules – Guidelines for increased confidence in PV module design qualification and type approval



## MECHANICAL DIAGRAMS



## SPECIFICATIONS

Cell	Mono
Weight	21.5kg±3%
Dimensions	1722±2mm×1134±2mm×30±1mm
Cable Cross Section Size	4mm <sup>2</sup> (IEC) , 12 AWG(UL)
No. of cells	108(6x18)
Junction Box	IP68, 3 diodes
Connector	QC 4.10(1000V) QC 4.10-35(1500V)
Cable Length (Including Connector)	Portrait: 300mm(+)/400mm(-); Landscape: 1200mm(+)/1200mm(-)
Packaging Configuration	36pcs/Pallet, 936pcs/40ft Container

Remark: customized frame color and cable length available upon request

## ELECTRICAL PARAMETERS AT STC

TYPE	-390 Watt	-395 Watt	-400 Watt	-405 Watt	-410 Watt	-415 Watt
Rated Maximum Power(Pmax) [W]	390	395	400	405	410	415
Open Circuit Voltage(Voc) [V]	36.85	36.98	37.07	37.23	37.32	37.45
Maximum Power Voltage(Vmp) [V]	30.64	30.84	31.01	31.21	31.45	31.61
Short Circuit Current(Isc) [A]	13.61	13.70	13.79	13.87	13.95	14.02
Maximum Power Current(Imp) [A]	12.73	12.81	12.90	12.98	13.04	13.13
Module Efficiency [%]	20.0	20.2	20.5	20.7	21.0	21.3
Power Tolerance	0~+5W					
Temperature Coefficient of Isc(α <sub>Isc</sub> )	+0.045%/°C					
Temperature Coefficient of Voc(β <sub>Voc</sub> )	-0.275%/°C					
Temperature Coefficient of Pmax(γ <sub>Pmp</sub> )	-0.350%/°C					
STC	Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, AM1.5G					

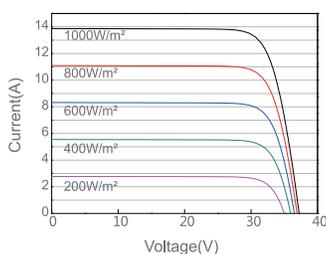
Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer.They only serve for comparison among different module types.

## ELECTRICAL PARAMETERS AT NOCT

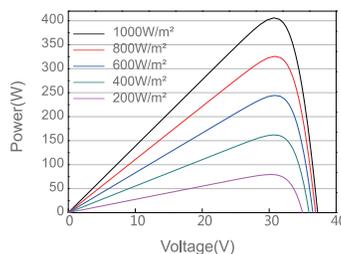
TYPE	-390 Watt	-395 Watt	-400 Watt	-405 Watt	-410 Watt	-415 Watt	OPERATING CONDITIONS	
Rated Max Power(Pmax) [W]	294	298	302	306	310	314	Maximum System Voltage	1000V/1500V DC
Open Circuit Voltage(Voc) [V]	34.62	34.75	34.88	35.12	35.23	35.37	Operating Temperature	-40°C~+85°C
Max Power Voltage(Vmp) [V]	28.87	29.08	29.26	29.47	29.72	29.89	Maximum Series Fuse Rating	25A
Short Circuit Current(Isc) [A]	10.89	10.96	11.03	11.10	11.16	11.22	Maximum Static Load,Front* Maximum Static Load,Back*	5400Pa(112lb/ft <sup>2</sup> ) 2400Pa(50lb/ft <sup>2</sup> )
Max Power Current(Imp) [A]	10.18	10.25	10.32	10.38	10.43	10.50	NOCT	45±2°C
NOCT	Irradiance 800W/m <sup>2</sup> , ambient temperature 20°C,wind speed 1m/s, AM1.5G						Safety Class	Class II
							Fire Performance	UL Type 1

## CHARACTERISTICS

Current-Voltage Curve -405 Watt



Power-Voltage Curve -405 Watt



Current-Voltage Curve -405 Watt

