

# 320W PERC Half-Cell Module

300-320/PR Series

### Introduction

Assembled with high-efficiency PERC cells, the half-cell configuration of the modules offers the advantages of higher power output, better temperature-dependent performance, reduced shading effect on the energy generation, lower risk of hotspot, as well as enhanced tolerance for mechanical loading.



Higher output power



Lower temperature coefficient



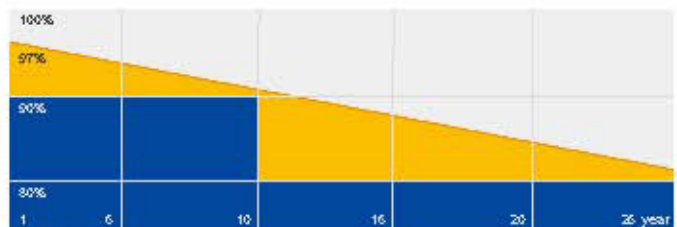
Less shading effect



Better mechanical loading tolerance

### Superior Warranty

- 12-year product warranty
- 25-year linear power output warranty



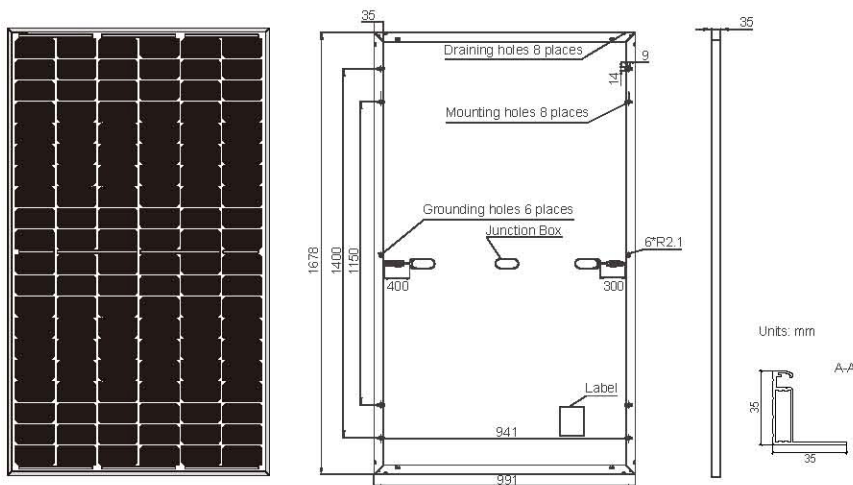
■ JH Linear Power Warranty ■ Industry Warranty

### Comprehensive Certificates

- IEC 61215, IEC 61730, IEC TS 62804, IEC 61701, IEC 62716, IEC 60068-2-68
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- OHSAS 18001: 2007 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**



Remark: customized frame color and cable length available upon request

**SPECIFICATIONS**

Cell	Mono
Weight	18.5kg±3%
Dimensions	1678mm×991mm×35mm
Cable Cross Section Size	4mm <sup>2</sup>
No. of cells	120(12x10)
Junction Box	IP68, 3 diodes
Connector	MC4 Compatible(1000V) QC 4.10-35(1500V)
Packaging Configuration	30 Per Pallet

**ELECTRICAL PARAMETERS AT STC**

TYPE	-300/PR	-305/PR	-310/PR	-315/PR	-320/PR
Rated Maximum Power(Pmax) [W]	300	305	310	315	320
Open Circuit Voltage(Voc) [V]	39.05	39.32	39.61	39.93	40.22
Maximum Power Voltage(Vmp) [V]	32.23	32.50	32.78	33.07	33.34
Short Circuit Current(Isc) [A]	9.90	9.97	10.03	10.10	10.16
Maximum Power Current(Imp) [A]	9.31	9.39	9.46	9.53	9.60
Module Efficiency [%]	18.0	18.3	18.6	18.9	19.2
Power Tolerance	0~+5W				
Temperature Coefficient of Isc( $\alpha_{Isc}$ )	+0.051%/°C				
Temperature Coefficient of Voc( $\beta_{Voc}$ )	-0.289%/°C				
Temperature Coefficient of Pmax( $\gamma_{Pmp}$ )	-0.360%/°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**

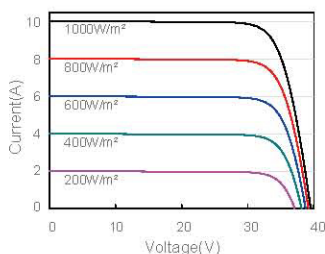
TYPE	-300/PR	-305/PR	-310/PR	-315/PR	-320/PR
Rated Max Power(Pmax) [W]	222	226	229	233	237
Open Circuit Voltage(Voc) [V]	36.05	36.32	36.61	36.93	37.15
Max Power Voltage(Vmp) [V]	32.22	32.47	32.77	33.06	33.31
Short Circuit Current(Isc) [A]	7.92	7.98	8.02	8.08	8.14
Max Power Current(Imp) [A]	6.89	6.95	7.00	7.05	7.11
NOCT	Irradiance 800W/m <sup>2</sup> , ambient temperature 20°C, wind speed 1m/s, AM1.5G				

**OPERATING CONDITIONS**

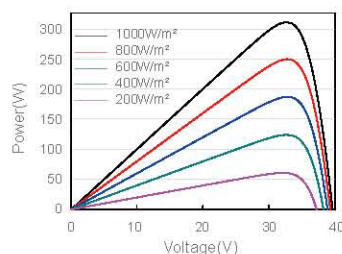
Maximum System Voltage	1000V/1500V DC(IEC)
Operating Temperature	-40°C~+85°C
Maximum Series Fuse	30A
Maximum Static Load,Front	5400Pa
Maximum Static Load,Back	2400Pa
NOCT	45±2°C
Application Class	Class A

**CHARACTERISTICS**

Current-Voltage Curve -310/PR



Power-Voltage Curve 310/PR



Current-Voltage Curve -310/PR

