

Poly

280W Half-Cell Module ASP280 Series

Introduction

The modules assembled with half cells not only generate more power output, but also perform better during daily operation as a result of lower temperature coefficient of power, along with reduced shading effect on the energy generation, lower risk of hot spot, and enhanced tolerance for mechanical loading.



Higher output power



Lower temperature coefficient



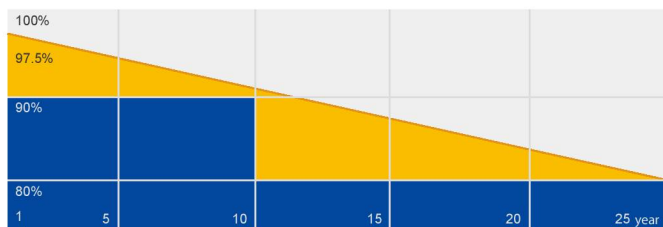
Less shading effect



Better mechanical loading tolerance

Superior Warranty

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



■ Arakawa Linear Power Warranty

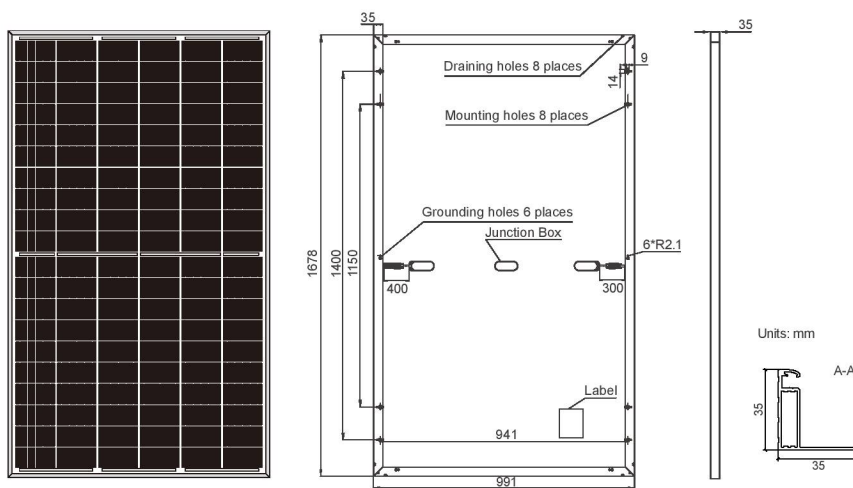
■ Industry Warranty

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	Poly
Weight	18.5kg±3%
Dimensions	1678mm×991mm×35mm
Cable Cross Section Size	4mm ²
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	ASP270	ASP275	ASP280	ASP285	ASP290
Rated Maximum Power(Pmax) [W]	270	275	280	285	290
Open Circuit Voltage(Voc) [V]	37.65	37.87	38.08	38.30	38.50
Maximum Power Voltage(Vmp) [V]	31.33	31.54	31.81	32.02	32.23
Short Circuit Current(Isc) [A]	9.24	9.33	9.43	9.53	9.62
Maximum Power Current(Imp) [A]	8.64	8.74	8.83	8.92	9.01
Module Efficiency [%]	16.2	16.5	16.8	17.1	17.4
Power Tolerance	0~+5W				
Temperature Coefficient of Isc(α_{Isc})	+0.054%/C				
Temperature Coefficient of Voc(β_{Voc})	-0.300%/C				
Temperature Coefficient of Pmax(γ_{Pmp})	-0.370%/C				
STC	Irradiance 1000W/m ² , 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

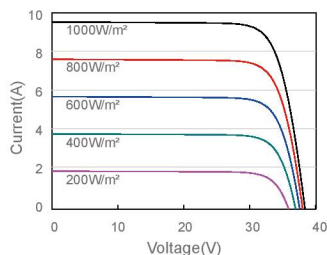
TYPE	ASP270	ASP275	ASP280	ASP285	ASP290
Rated Max Power(Pmax) [W]	200	204	207	211	215
Open Circuit Voltage(Voc) [V]	36.25	36.56	36.85	37.05	37.25
Max Power Voltage(Vmp) [V]	29.29	29.48	29.69	29.83	30.01
Short Circuit Current(Isc) [A]	7.27	7.33	7.40	7.49	7.57
Max Power Current(Imp) [A]	6.82	6.90	6.98	7.07	7.15
NOCT	Irradiance 800W/m ² , ambient temperature 20°C, wind speed 1m/s, AM1.5G				

OPERATING CONDITIONS

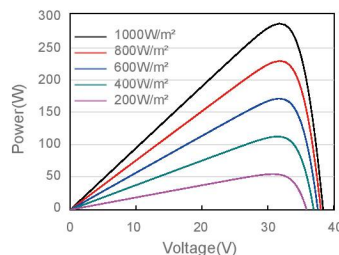
Maximum System Voltage	1000V/1500V DC(IEC)
Operating Temperature	-40°C~+85°C
Maximum Series Fuse	30A
Maximum Static Load,Front	5400Pa
Maximum Static Load,Back	2400Pa
NOCT	45±2°C
Application Class	Class A

CHARACTERISTICS

Current-Voltage Curve ASP285



Power-Voltage Curve ASP285



Current-Voltage Curve ASP285

