

American Solar⁺

Polycrystalline

290/295/300/305/310

Made In USA & Made Abroad Lines

WHOLESALE

"QUALITY YOU CAN COUNT ON"

Features

- Top Ranked PTC Rating
- High Module Conversion Efficiency
- Fast and Inexpensive Mounting
- Maximizes System Output by Reducing the Mismatch Loss.
- 100% EL Testing on All ASW Modules, Guaranteed No Hotspot
- Guaranteed Positive Output Tolerance (0+3%)
- Withstand High Wind (2400 Pa) and Snow Loads (5400 Pa)
- Excellent Performance in Low Light Environments



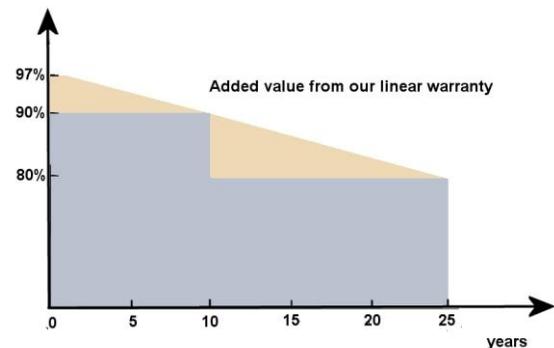
Function

- On-grid Rooftop / Ground Mounted
- Residential / Commercial / Power Stations

Precautions

Only qualified personnel should install or perform maintenance. Please read the American Solar Wholesale Installation Manual before installation; Be aware of dangerously high DC voltage; Do not install modules when wet or broken.

Linear Warranty



All ASW solar modules are guaranteed to perform for 25 years from the date of purchase. Performance standards insure linear production levels starting at 97.5% at the end of the first year and a maximum decrease of only .07% each year thereafter.

- 5 years at 95% or above
- 5 more years at 90% or above
- 15 more years at 80% or above
- 10 year material & workmanship guarantee



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Electrical

Maximum Power at STC (Pmax)	290W	295W	300W	305W	310W
PV USA Test Conditions (PTC)	265.3W	270.6W	275.2W	275.6W	280.1W
Optimum Operating Voltage (Vmp)	37.23 V	37.25 V	37.46 V	37.63 V	37.7 V
Optimum Operating Current (Imp)	7.79 A	7.92 A	8.01 A	8.10 A	8.20 A
Open-Circuit Voltage (Voc)	44.72 V	45.62 V	46.12 V	46.33 V	46.46V
Short-Circuit Current (Isc)	8.45 A	8.51 A	8.56 A	8.62 A	8.70A
Module Efficiency	14.9%	15.2%	15.5%	15.7%	16.0%
Cell Efficiency	16.9%	17.1%	17.3%	17.6%	17.9%

STC: Irradiance 1000 W/m², module temperature 25°C, AM=1.5

Mechanical

Solar Cell	Polycrystalline 156 x 156 mm (6 inches)
No. of Cells	72 (6 x 12)
Dimensions	1956 x 992 x 50 mm (76.9 x 39.0 x 2.0 inches)*
Weight	23.0 kgs (50.6 lbs)
Front Glass	3.2 mm (0.13 inches) tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP65/IP67 rated
Output Cables	4.0 mm ² (0.006 inches ²), 1200mm (47.2 inches)
Connectors	MC4 connectors
Fire Rating	Classs C
ETL listed to UL 1703 standard	

Temperatures

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.44%/°C
Temperature Coefficient of Voc	-0.30%/°C
Temperature Coefficient of Isc	0.04%/°C

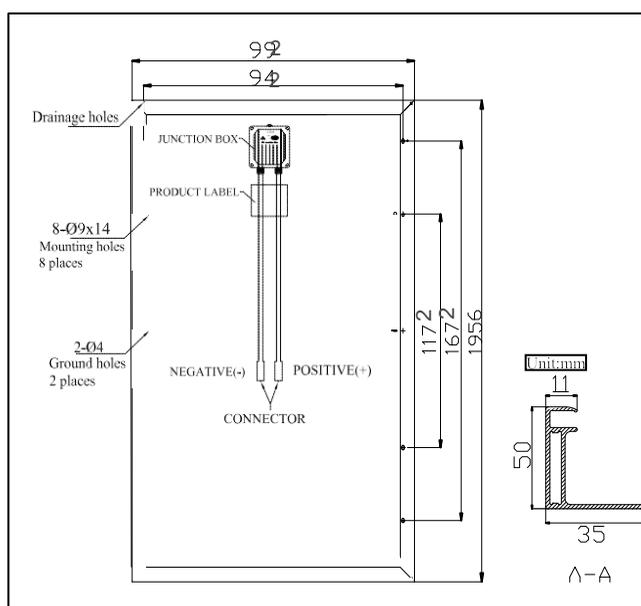
Maximum Ratings

Operating Module Temperature	-40°C to +90°C
Maximum System Voltage	Certified for 600V or 1000V
Maximum Series Fuse Rating	15 A

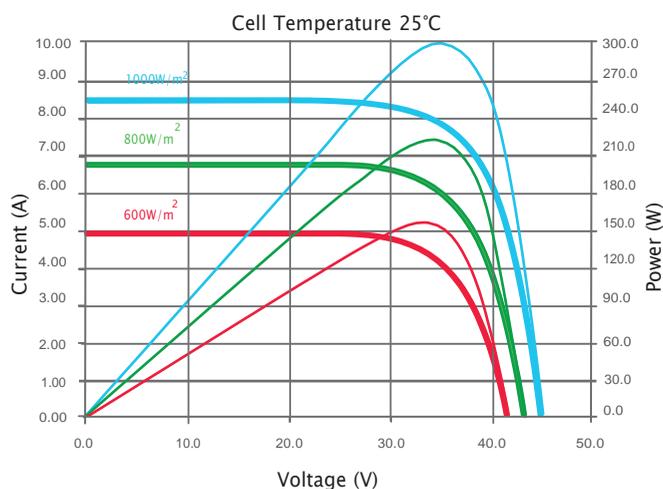
Packaging

Per Pallet	21 pcs (20' CTN)/23 pcs (40' CTN)
Per Container	252 pcs (20' CTN)/552 pcs (40' CTN)

Diagram



I-V Curves



Current, Power vs. Voltage Characteristics of ASW-300P

Current vs. Voltage

Power vs. Voltage