

MONO PERC. 310WP

295-315 W

PERC
technology



HIGH QUALITY AND RELIABLE MODULES

- **High Conversion Efficiency**
Industry-leading processing techniques realize great module efficiency to a maximum of 19.36%, steady power output guaranteed.
- **Anti-reflective Coating and Reduce O&M Costs**
Easier to clean by rainwater to remove dirt on the glass surface, making higher power output and lower maintenance costs.
- **0 to +5W Positive Tolerance**
Gain more power yields than expected.
- **Excellent Loading Capability**
2400Pa wind loads, 5400Pa snow loads.
Durable and long-lasting.
- **Top-quality & Trustworthy Product**
Rigorous Quality Management System built.
Multiple internationally recognized PV industry standard certifications attained.



POWER OUTPUT WARRANTY

- 15-year product warranty
- 25-year linear power output warranty
- For the 1st year, Stern guarantees that the actual output of the PV module will be no less than 97,5% of the nominal power output.
- From 2nd year to 24th year, the actual output annual decline will be no more than 0.7% and by the end of 25th year, the actual power output of the PV module will be no less than 80.7%.

0+5W
POWER TOLERANCE

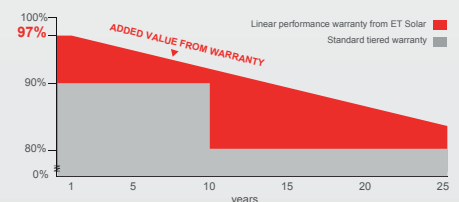
19,36 %
MAXIMUM EFFICIENCY

295-315 W
POWER OUTPUT RANGE



COMPREHENSIVE CERTIFICATES FOR PRODUCTS AND MANAGEMENT

- ISO 9001 for Quality Management Systems
- ISO 14001 for Environmental Management Systems
- ISO 18001 Occupational Health and Safety System
- UL 1703, IEC 61215, IEC 61730, CEC listed, MCS and CE



IEC 61215 Ed.2
IEC 61730
IEC 61701
IEC 62716



Electrical Characteristics STC

STC: AM1.5 Irradiance 1000 W/m ² / 25°C	STERN 315 M	STERN 310 M	STERN 305 M	STERN 300 M	STERN 295 M
Maximum Power (Pmax)	315 W	310 W	305 W	300 W	295 W
Maximum Power Current (Imp)	8.61 A	8.71 A	8.82 A	8.92 A	9.02 A
Maximum Power Voltage (Vmp)	33.20 V	32.98 V	32.76 V	32.54 V	32.35 V
Short Circuit Current (Isc)	9.93 A	9.86 A	9.78 A	9.69 A	9.65 A
Open Circuit Voltage (Voc)	41.05 V	40.75 V	40.26 V	39.97 V	39.78 V
Module Efficiency	19.36%	19.05%	18.75%	18.44%	18.13%
Power Tolerance	0+5 W	0+5 W	0+5 W	0+5 W	0+5 W
Operating Temperature	-40~+85°C				
Maximum System Voltage	DC 1000 V				
Nominal Operating Cell Temperature	45 ±2°C				
Fire Safety	Class C				
Maximum Series Fuse Rating	20 A				

Mechanical Characteristics

Type Cell	156.75 x 156.75 mm
Number of Cells	60 cells in series
Weight	18.5 kg (40.79 lbs)
Dimension	1640x992x35mm (64.57x39.06x1.38 inch)
Max Load	5400 Pascals (112 lbs/ft ²)
Junction Box	≥IP67 rated
Connector	MC4 Compatible
Output cable	PV 1-F 4 mm ²

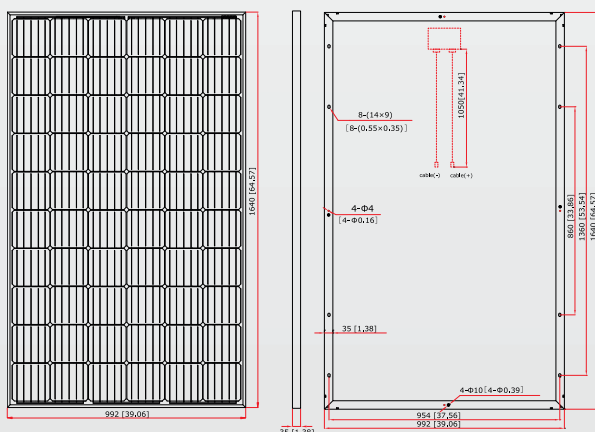
Packing Information

Container	40
Pieces per Pallet	30
Pieces per Container	840

Thermal Characteristics

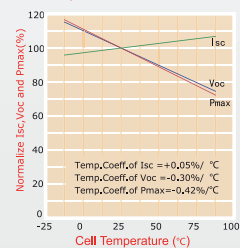
Temp. Coeff. of Isc (TK ISC)	-0.05%/°C
Temp. Coeff. of Voc (TK Voc)	-0.30%/°C
Temp. Coeff. of Pmax (TK Pmax)	+0.42%/°C

Physical Characteristics Unit:mm (inch)

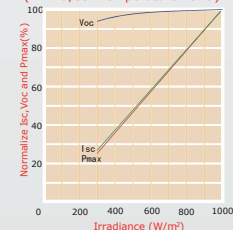


Electrical Characteristics

Temperature Dependence of Isc, Voc and Pmax



Irradiance Dependence of Isc, Voc and Pmax (AM1.5, Cell Temperature 25°C)



Note: the specifications are obtained under the Standard Test Conditions (STCs): 1000 W/m² solar irradiance, 1.5 Air Mass, and cell temperature of 25°C. The NOCT is obtained under the Test Conditions: 800 W/m², 20°C ambient temperature, 1m/s wind speed, AM 1.5 spectrum. Please contact support@sternsolartechnik.de for technical support. The actual transactions will be subject to the contracts. This parameters is for reference only and it is not a part of the contracts. The specifications are subject to change without prior notice