

SN 60-Cell^{1,000V}

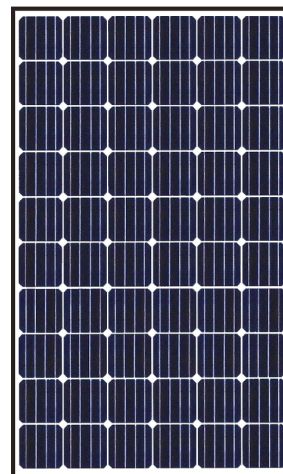
Monocrystalline PV Module

SN285M-10 SN290M-10 SN295M-10 SN300M-10



285 ~ 300 Watt

Continuously manufacturing PV modules since 1991, S-Energy is one of the most experienced module makers in the industry. More than 20 years of operating data support S-Energy's reputation as the best overall quality, performance, and value for solar investors. The cutting-edge SN-series leads the industry again in advanced design, construction, and performance. The SN-series is the ideal module for any system size in any given environment. With the quality to last the lifetime of the PV system, S-Energy's SN-series provides the confidence and assurance to each and every one of our customers.



Features



ENHANCED EXTERNAL LOAD / IMPACT

Snow Load : 5,400 Pa (30T) / 8,400 Pa (40T)
 Wind Load : 2,400 Pa (30T) / 5,400 Pa (40T)
 Hail Impact : 30.7m/s (speed ball)



POSITIVE TOLERANCE

0~+5W positive power sorting



POWER ADVANTAGE

25-year, linear power warranty
 > 97.5% nominal power during 1st year
 Positive tolerance up to +5W



PID RESISTANCE

Enhanced potential induced degradation



ENVIRONMENT RESISTANCE

Suitable for extreme conditions
 Resistant to high salt mist and ammonia
 (certified by TÜV Rheinland)



AVAILABLE IN TWO THICKNESSES

Standard (30T) and 40T for more durability

Qualifications & Certifications

IEC 61215 & 61730, CE, ISO 9001
 ISO 14001, OHSAS 18001, MCS, WEEE



Mechanical Characteristics

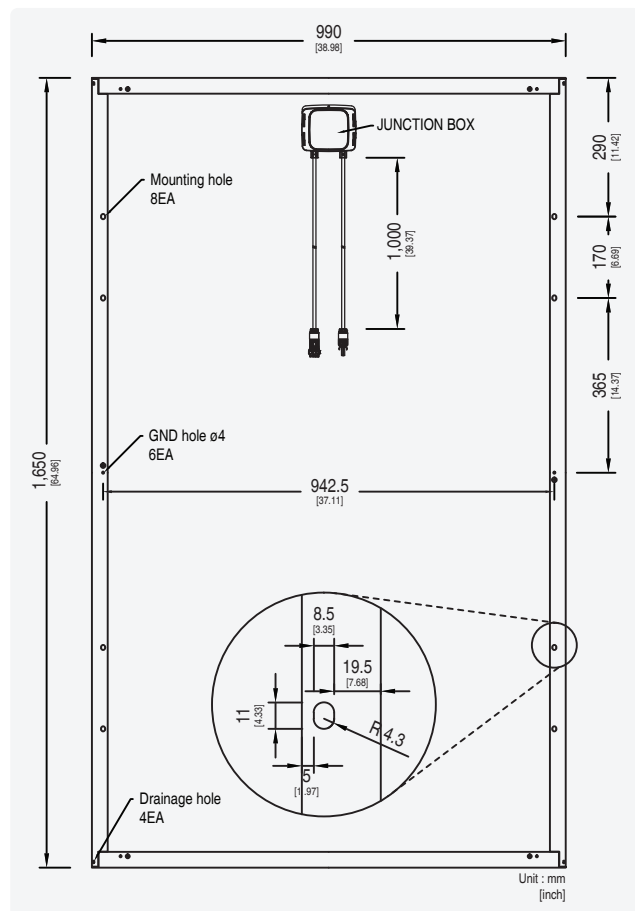
Solar Cells	Monocrystalline 156 x 156mm (6 inches)
Number of Cells	60 Cells, 6 x 10matrix
Dimensions	1,650 x 990 x 30mm (30T) / 1,650 x 990 x 40mm (40T)
Weight	17kg (37.48 lbs)
Front Glass	High-Transmittance Low Iron Tempered Glass
Frame	Anodized Aluminum Frame (Silver / Black)
Output Cables	PV Wire (PV1-F), 12AWG (4mm ²), Cable Length : 1,000mm
Connectors	MC4 Connectable

Warranty

Product Warranty	10-year Limited Product Warranty
Performance Warranty	Minimum Power Output for Year 1 : 97.5%
	Maximum Power Decline from Year 2 to 24 : 0.7%
	Power Output at year 25 : 80.7%

Electrical Characteristics

STC (Irradiance 1,000W/m ² , module temperature 25°C, AM=1.5)	SN285M-10	SN290M-10	SN295M-10	SN300M-10
Rated Power (P _{max})	285W	290W	295W	300W
Voltage at P _{max} (V _{mp})	32.1V	32.6V	33.1V	33.6V
Current at P _{max} (I _{mp})	8.87A	8.89A	8.91A	8.93A
Warranted Minimum P _{max}	285W	290W	295W	300W
Short-Circuit Current (I _{sc})	9.46A	9.50A	9.54A	9.57A
Open-Circuit Voltage (V _{oc})	40.5V	40.7V	40.9V	41.0V
Module Efficiency	17.45%	17.75%	18.06%	18.37%
Operating Module Temperature	-40°C to +85°C			
Maximum System Voltage	1,000V(IEC) / 1,000V(UL)			
Maximum Series Fuse Rating	15A			
Maximum Reverse Current	20.25A			
Power Tolerance	0 ~ +5 W			

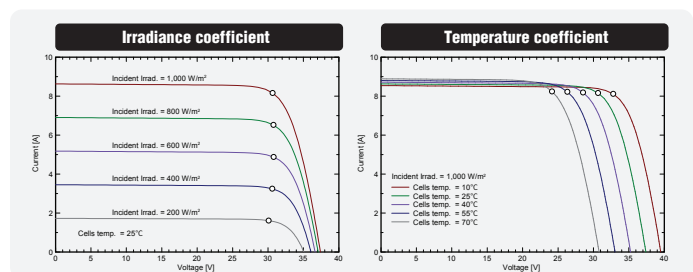


Temperature Characteristics

Temperature coefficient of I _{sc}	0.052 % / °C
Temperature coefficient of V _{oc}	-0.312 % / °C
Temperature coefficient of power	-0.429 % / °C
NOCT (T _{air} 20°C ; Irradiance 800W/m ² ; Wind 1m/s)	45±3 °C

Packing Configuration

	30T	40T
Container	40' DRY	40' H/C
Modules Per Pallet	25pcs	25pcs
Pallets Per Container	26pallets	26pallets
Modules Per Container	650pcs	650pcs



Remarks :

P_{max} measurement tolerance : ±2.5%

S-Energy uses triple AAA class simulator.

Specification subject to change without prior notice. S-Energy reserves the rights of final interpretation.

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