Mats Series

00W/705W/710W/715W/720W/725W/730W

66MD-H12NS COMPREHENSIVE CERTIFICATES

HALF-CELL BIFACIAL MONO N-Type TOPCon DOUBLE GLASS MODULE



SUNERGY USA WORKS LLC

Founded in 2008, Sunergy is a manufacturer of high-performance photovoltaic products. With 12 manufacturing bases and more than 20 branches around the world, the company's business covers modules, photovoltaic power stations and EPC. Sunergy products are available in over 120 countries and regions and are used extensively in ground-mounted power plants, commercial & industrial rooftop PV systems and residential rooftop PV systems.

QUALIFICATIONS AND CERTIFICATES













IEC61215 / IEC61730 / IEC61701 / IEC62716 /IEC62804 ISO 9001: 2015 Quality management systems;

ISO 14001: 2015 Environmental management systems; ISO 45001: 2018 Occupational

health and safety management systems;

Sunergy Advantages



Overflow tank can be waterproof

The excess silicone will flow into the overflow tank, can reduce 3%water vapor entering the panels



Stronger frame

The C side of the frame contains curved hook reinforcement, enhanced the mechanical load strength by 10%



Current grading

Current classification effectively avoids 2% power loss caused by current mismatch during installation, achieving max output power



IP68 junction box

IP68 junction box offer perfect waterproof performance

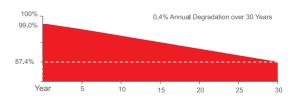


Higher fire rating

Fire rating up to Class A, reduce fire hazards;

LINEAR PERFORMANCE WARRANTY

- 12 Years Manufacturing Warranty
- 12 Years 94.6% Power Output
- 30 Years 87.4% Power Output

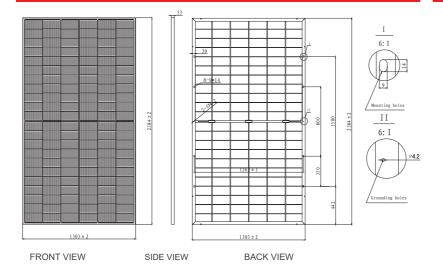


SUNERGY USA WORKS LLC www.sunergyworks.com





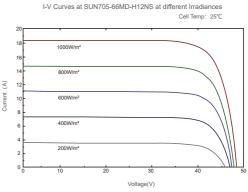
MECHANICAL DRAWINGS



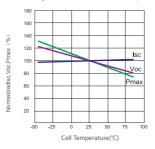
MECHANICAL SPECIFICATION

Cell Type	N-Type Mono Crystalline 210x105mm
Number Of Cells	132 (6x22)
Dimensions(AxBxC)	2384x1303x33mm
Weights	37.8kg
Glass	2.0/2.0mm Tempered Low Iron Glass
Aluminium Frame	Anodised Aluminium
Junction Box	Split Junction Box (IP68 ,three diode)
Connector	Mc4 Compatible
Output Cables	4.0mm²,+300mm,-300mm Customized Length

I-V CURVES



Power voltage current curve at different temperature



PACKING CONFIGURATION

Container	40' HQ
Pieces Per Pallet	33
Pallets Per Container	18
Pieces Per Container	594

ELECTRICAL CHARACTERISTICS

Module Type	700W		70	705W 71		10W 71		715W 72		20W 72		25W 730		0W
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power At STC(Pmax)	700W	528.8W	705W	532.6W	710W	536.4W	715W	540.2W	720W	543.9W	725W	547.7W	730W	551.5W
Short Circuit Current(Isc)	18.33A	14.84A	18.38A	14.88A	18.43A	14.92A	18.48A	14.96A	18.54A	15.01A	18.59A	15.05A	18.64A	15.09A
Open Circuit Voltage(Voc)	48.51V	46.04V	48.69V	46.21V	48.87V	46.38V	49.05V	46.56V	49.23V	46.73V	49.41V	46.90V	49.59V	47.07V
Maximum Power Current(Impp)	17.32A	14.02A	17.37A	14.06A	17.42A	14.10A	17.47A	14.14A	17.52A	14.18A	17.57A	14.22A	17.62A	14.26A
Maximum Power Voltage(Vmpp)	40.42V	37.71V	40.59V	37.88V	40.76V	38.04V	40.93V	38.21V	41.10V	38.35V	41.27V	38.51V	41.44V	38.68V
Module Efficiency	22	2.5%	2	2.7%	22	2.9%	2.	3.0%	23	3.2%	23	3.3%	23	3.5%
Power Tolerance	0~	+5W	0~	+5W	0~	+5W	0~	+5W	0~	+5W	0~	+5W	0~	+5W

VDC 1500V Maximum System Voltage 35A Maximum Series Fuse Increased Snowload Acc. to lec 61215 5400Pa **Operating Temperature** -40~+85°C 3 Number Of Bypass Diodes 45°C±2°C Norminal Operating Cell Temperature(Noct) Temperature Coefficient Of Pmax -0.29%℃ -0.24%℃ Temperature Coefficient Of Voc 0.046%℃ Temperature Coefficient Of Isc

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN

(Reference to 700W Front)

Backside Power Gain	10%	15%	20%	25%
Maximum Power At STC(Pmax)	770	805	840	875
Short Circuit Current(Isc)	20.15	21.06	21.96	22.86
Open Circuit Voltage(Voc)	48.66	48.81	48.96	49.11
Maximum Power Current(Impp)	19.05	19.90	20.76	21.61
Maximum Power Voltage(Vmpp)	40.43	40.45	40.47	40.49

STC: 1000W/m² irradiance, 25°C cell temperature, AM1.5. NOCT: Irradiance at 800W/m², Ambient Temperature 20°C , wind speed 1m/s



