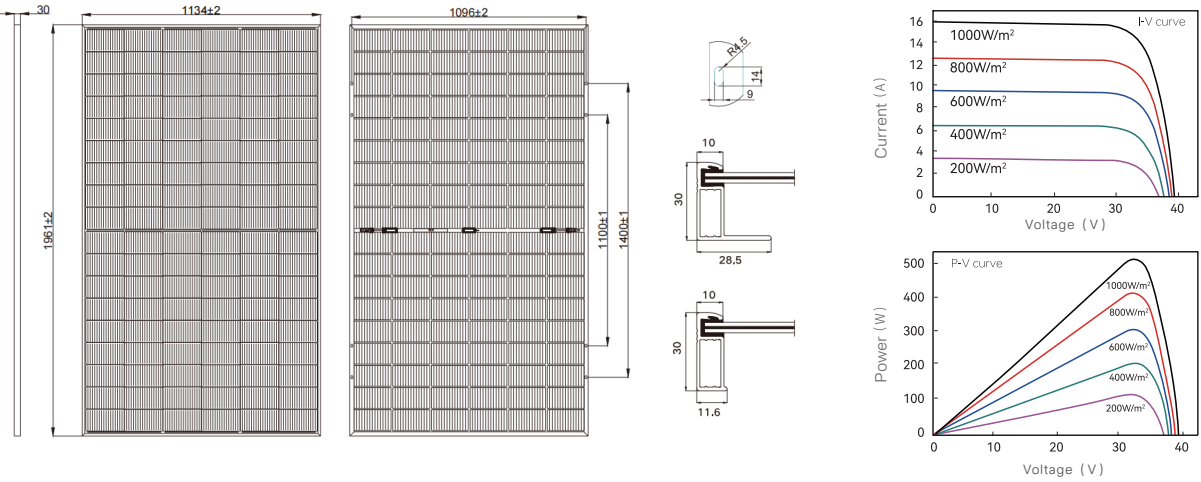




Engineering Drawings



Electrical Characteristics

Module Type	SG-54TG4D - 500	SG-54TG4D - 505	SG-54TG4D - 510	SG-54TG4D - 515	SG-54TG4D - 520	
Maximum Power Pmax (W)	500	505	510	515	520	
Voltage at Maximum Power (Vmp/V)	33.70	33.94	34.19	34.43	34.67	
Current at Maximum Power (Imp/A)	14.84	14.88	14.92	14.96	15.00	
Open Circuit Voltage (Voc/V)	40.06	40.24	40.42	40.60	40.78	
Short Circuit Current (Isc/A)	15.89	15.92	15.95	15.98	16.01	
Module Efficiency (%)	22.5	22.7	22.9	23.2	23.4	
Pmax/Voc/Isc Tolerance	±3%		Maximum System Voltage		DC1500V	
Maximum Series Fuse Rating	30A		Operating Temperature		-40°C~+70°C	
Fire Rating	Class C		Power SortingTolerance		0~+5W	

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

Maximum Power Pmax (W)	550	556	561	567	572	
Voltage at Maximum Power (Vmp/V)	33.70	33.94	34.19	34.43	34.67	
Current at Maximum Power (Imp/A)	16.32	16.37	16.41	16.46	16.50	
Open Circuit Voltage (Voc/V)	40.06	40.24	40.42	40.60	40.78	
Short Circuit Current (Isc/A)	17.48	17.51	17.55	17.58	17.61	
aBSI(A)	19.42	19.46	19.49	19.53	19.57	
Pmax/Voc/Isc/aBSI Tolerance	±3%					
Bifaciality Coefficient	φVoc: 100±3 %, φIsc: 80±10 %, φPmax: 80±10 %					

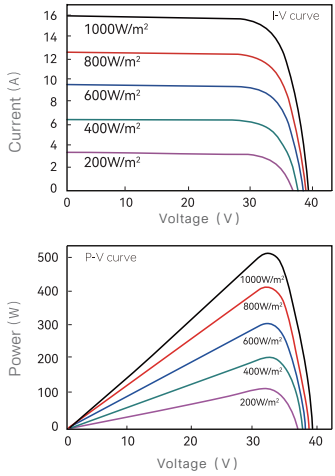
BNPI: Irradiance Front 1000W/m², Rear 135W/m² Cell Temperature 25°C, AM=1.5
aBSI: Irradiance Front 1000W/m², Rear 300W/m² Cell Temperature 25°C, AM=1.5

Mechanical Characteristics

Cell Type	N- type mono-crystalline
Cell Orientation	108 (2 x 54)
Dimension	1961 x 1134 x 30mm
Weight	27.5kg
Glass	Dual glass, 2.0mm+2.0mm semi-tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68 rated
Output Cables	4mm², (+): 1200mm, (-): 1200mm or customized length
Connector Type	Z4S-abcd(Zerun)/PV-ZH202B(Zhonghuan)/PV-HT03x(x=0,1or 2)(Haitian)/QC4.10-cds(QC Solar)/PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy(Staubli)
Mechanical Load	+5400Pa (Front side) /-2400Pa (Rear side)

I-V and P-V Curves

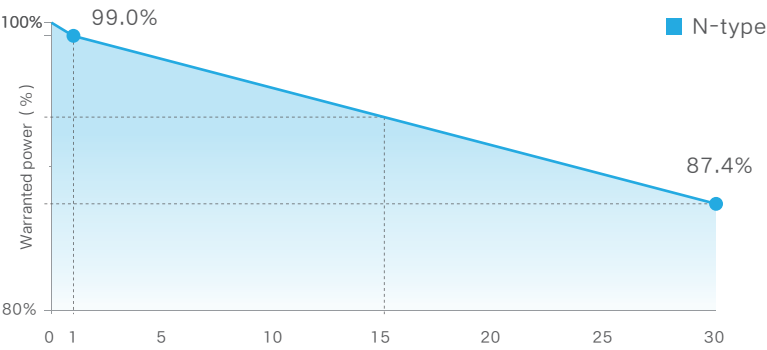
Temperature: (25 ± 2) °C



Quality Certification



Product Warranty



25-year Warranty for Materials and Processing

30-year Warranty for Extra Linear Power Output

First Year Power Degradation<1%

Year 2-30 Power Degradation<0.4%

Power warranty applies at STC condition or only applies to the front side of the module

Product Performance



Higher Efficiency

Excellent MBB technology and leading process technology, conversion efficiency up to 23.4%



Smaller Size

A lightweighted design for convenient transportation and installation



Higher Bifacial Factor

The rear power output and generation capacity are 20% and 3.5% higher than PERC, respectively



Superior Temperature Coefficient

Generating 1%-2% more power than P-type modules in high temperature regions



Non-destructive Laser Cutting Technology

Achieving better cell strength, lower micro-cracks risk for better product reliability



Superior Mechanical Load Capacity

Heavy snow load up to 5400 Pa
wind load up to 2400 Pa

Temperature Characteristics

Temperature Coefficients of Pmax	-0.30%/°C
Temperature Coefficients of Voc	-0.25%/°C
Temperature Coefficients of Isc	0.046%/°C
Temperature Rating [T98]max	70°C

Packaging Configuration

Pallet Dimension	1991 x 1120 x 1250 mm
Packing Detail	37 pcs/pallets, 74 pcs/stack, 864 pcs/ 40'HQ container

SUNGROW

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*Specifications included in this datasheet are subject to change without notice. Sungrow Renewables reserves the right of final interpretation.