

## HiMAX 5N

# 510-540W

## SP540M-66H

N-type TOPCon Solar Module

### 10-30% Additional Power Generation

30 years lifespan brings 10-30% additional power generation comparing with conventional P-type module.

### ZERO LID (Light Induced Degradation)

N-type solar cell has no LID naturally which can increase power generation.

### Higher Reliability

Adpoted SunPal latest S-TOPCon 2.0 technology, No polysilicon wrap around, Full electrical isolation, Zero leakage current; Much Safer for roof.

### Better Weak Illumination Response

Higher power output even under low-light environments like on cloudy or foggy days.

### Better Temperature Coefficient

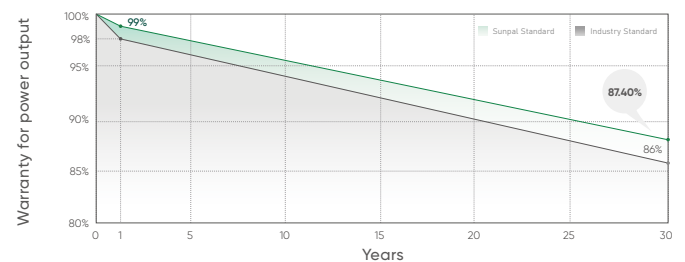
Higher power generation under working conditions, thanks to passivating contact cell technology.

### Quality Management System and Product Certification

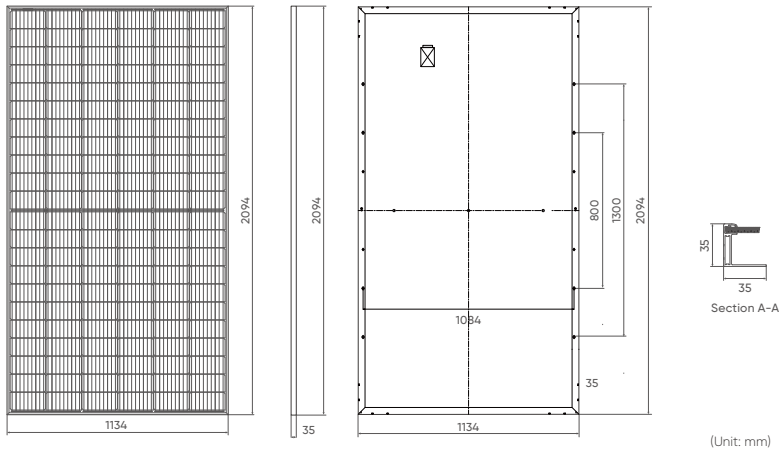
IEC61215/61730, IEC62804(PID), IEC61701(Salt).  
IEC62716 (Ammonia), IEC60068-2-68(Sand).  
ISO 9001:2015/quality management system.  
ISO 14001:2015/environmental management system.  
ISO 45001:2018/occupation health safety management system.  
ISO 50001:2011/energy management system.  
IEC TS 62941-2016/PV industry quality management system.

### Quality Guarantee

**25 YEAR** Materials Warranty      **30 YEAR** Power Warranty



## Drawings



## Mechanical Characteristics

Solar Cells	N-type Mono
No. of Cells	132 (6×22)
Dimensions	2094 × 1134 × 35mm
Weight	25.5kg
Glass	3.2mm coated tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 by pass diodes)
Output Cables	4mm <sup>2</sup> , 300mm (+) / 300mm (-), Length can be customized
Connectors	Mc4 compatible
Mechanical load test	5400Pa
Packaging	31pcs/box, 155pcs/20'GP, 682pcs/40'HQ

## Electrical Parameters (STC\*)

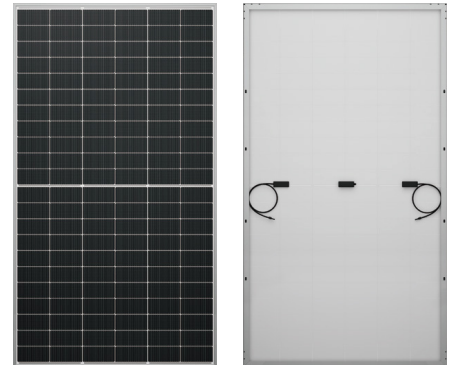
Module Type: SP540M-66H	510	515	520	525	530	535	540
Maximum power (Pmax/W)	510	515	520	525	530	535	540
Open Circuit Voltage (Voc/V)	46.64	46.84	47.03	47.22	47.41	47.60	47.79
Short Circuit Current (Isc/A)	14.00	14.07	14.14	14.21	14.28	14.35	14.42
Voltage at Maximum power (Vmpp/V)	39.02	39.19	39.36	39.53	39.70	39.87	40.04
Current Maximum Power (Impp/A)	13.07	13.14	13.21	13.28	13.35	13.42	13.49
MODULE EFFICIENCY (%)	21.48	21.69	21.90	22.11	22.32	22.53	22.74

## Electrical Parameters (NMOT\*)

	383	387	391	395	399	403	407
Maximum power (Pmax)	383	387	391	395	399	403	407
Open Circuit Voltage (Voc/V)	44.41	44.58	44.74	44.90	45.05	45.20	45.35
Short Circuit Current (Isc/A)	11.28	11.34	11.40	11.46	11.52	11.58	11.64
Voltage at Maximum power (Vmpp/V)	35.93	36.10	36.27	36.44	36.61	36.78	36.95
Current Maximum Power (Impp/A)	10.66	10.72	10.78	10.84	10.90	10.96	11.02

1. Standard Test Conditions [STC]: irradiance 1000W/m<sup>2</sup>; AM 1.5; ambient temperature 25°C according to EN 60904-3;  
 2. Nominal Module Operating Temperature (NMOT): irradiance 800W/m<sup>2</sup>; wind speed 1m/s, ambient temperature 20°C.  
 3. Tolerance of Pm: 0/+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

## Product Image



## Operating Characteristics

Operating Module Temperature	-40°C to +85°C
Maximum System Voltage	1500 DC (IEC)
Maximum Series Fuse Rating	25A
Power Tolerance	0/+5W

## Temperature Characteristics

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	+0.045%/°C

## I-V Curve

