

TOPCon N type Bifacial Mono-crystalline 610-630Watt

0~+5W POWER TOLERANCE

High efficiency TOPCon N - type solar module



Module characteristics



Strong Mechanical Strength

Pass the wind load test of 2400Mpa and the snow load test of 5400Mpa



Lower attenuation

N-type, good reliability and lower LID/LETID attenuation rate.



PID resistance

The attenuation probability of PID phenomenon is minimized through solar cell production technology optimization and raw material control



Harsh environmental adaptation

Robust design for demanding climate conditions.



Multiple busbar and Half cell technique

More light utilization and current collection capabilities, effectively improving product power output and reliability



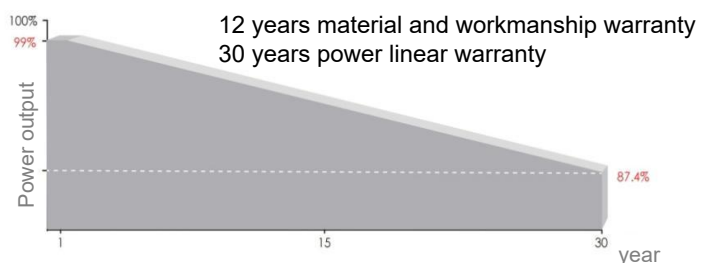
Long and reliable quality assurance

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality management system

ISO14001:2015: Environmental management system

ISO45001:2018: Occupational health and safety management system



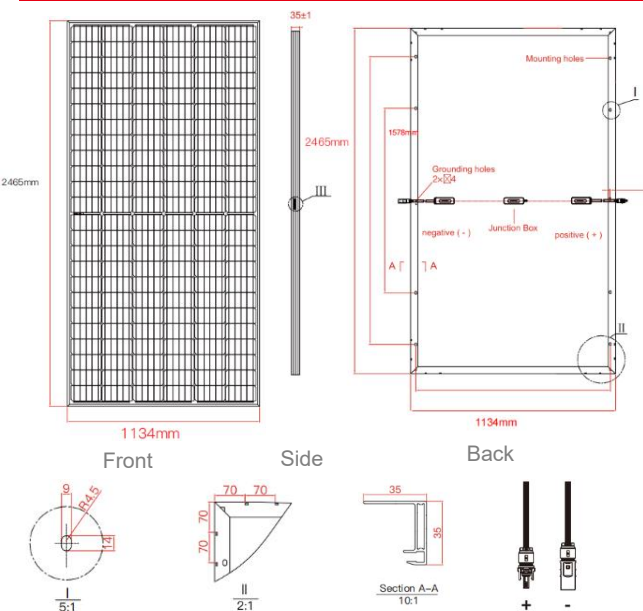
Linear attenuation of 0.4% per year from the 2nd to 30th year.

Electrical Parameters

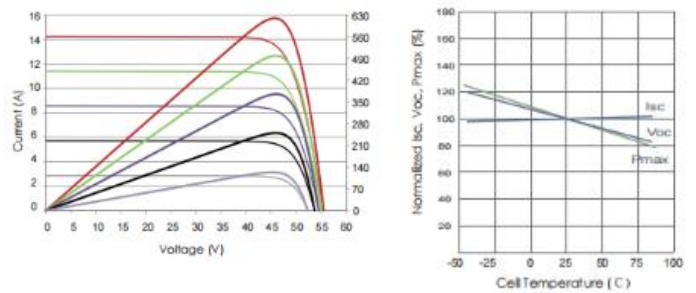
Model Type	ESM-610T		ESM-615T		ESM-620T		ESM-625T		ESM-630T	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	610	459	615	463	620	467	625	470	630	473
Open Circuit Voltage (Voc)	55.33	52.56	55.48	52.70	55.63	52.84	55.78	52.98	55.93	53.12
Short Circuit Current (Isc)	14.09	11.37	14.16	11.43	14.23	11.48	14.30	11.54	14.37	11.60
Maximum Power Voltage (Vmp)	45.66	42.28	45.76	42.49	45.86	42.61	45.96	42.72	46.06	42.83
Maximum Power Current (Imp)	13.36	10.83	13.44	10.89	13.52	10.95	13.60	11.01	13.67	11.04
Module Efficiency - η_m (%)	22.02		22.20		22.38		22.56		24.37	
Operational Temperature	-40°C ~ +85°C									
Maximum System Voltage	1500VDC									
Maximum Series Fuse Rating	25A									
Power Tolerance	0 ~ +3%									
Temperature Coefficient of Pmax	-0.360%/°C									
Temperature Coefficient of Voc	-0.260%/°C									
Temperature Coefficient of Isc	+0.04%/°C									
Nominal Operating Cell Temperature	45 ± 2°C									
Safety Class	Class II									
Max Load (Front/back)	5400Mpa/2400Mpa									

STC: Irradiance 1000W/m² Cell temperature 25°C Atmospheric quality = 1.5
 NOCT: Irradiance 800W/m² Ambient temperature 25°C Atmospheric quality = 1.5 Wind speed 1m/S

Mechanical Diagrams



Curve



Packing Details:

31pcs/pallet

40GP: 16 pallets/container, 496pcs/40'HQ

EINNOVA SOLARLINE ENERGY CORP. LIMITED

210000 Nanjing
 PEOPLE'S REPUBLIC OF CHINA
 TEL: +86-25-8479-2033
 Cell: +86-138-13088384
 EMAIL: emma.wu@einnova-solarline.com
 Website: www.einnova-solarline.com

Specification

Cell type	N type mono crystalline 182mm
Half-cell quantity	156pcs (26×6)
Dimension	2465×1134×35mm
Weight	31kg±3%
Glass	3.2mm, tempered and AR coated
Frame	Silver Anodized Aluminum Alloy
Junction Box	IP68
Cable	1200mm (can be customized)