

Mono Perc

ZH(520-550)-144M

Half-Cell High Efficiency PV Module

Max Module Efficiency: 21.28%

KEY FEATURES

- Excellent module efficiency up to:21.28%
- IP68 junction box for long-term weather endurance
- Heavy snow load up to 5400 Pa, wind load up to 3600 Pa
- PID: Selected material and stringent quality system ensure PID free
- Applicable to harsh environment of deserts, farmlands and seashores
- Much lower risk of hot spot

CERTIFICATE



COMPREHENSIVE

Products and System Certificates

IEC 61215 / IEC 61730 / CE / INMETRO

ISO 9001: 2015/Quality management system

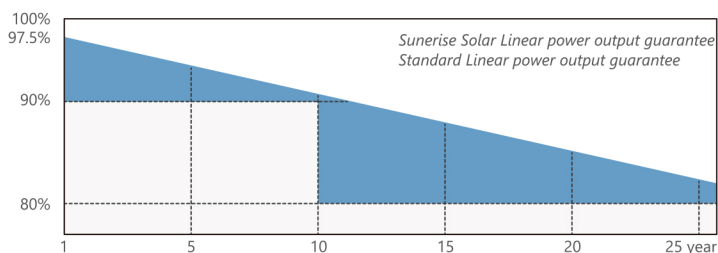
ISO 14001: 2015/Standards for environmental management system

OHSAS 18001: 2007/International standards for occupational health & safety

WARRANTY

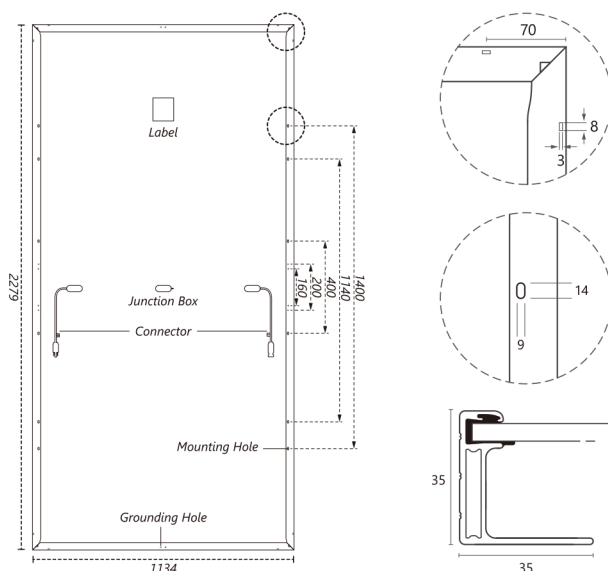
30 years
Linear power output warranty
*12 years minimum 92% power output
*30 years minimum 83% power output

12 years
Product warranty on materials and workmanship
According to the applicable Einnova Solarline Limited Warranty Statement



ZH(520-550)-144M

DESIGN



MECHANICAL SPECIFICATION

Cell Type	Dimension (L×W×T)	Weight
Mono 182×91mm	2279×1134×35mm	29kg
Packing	31pcs/pallet, 620pcs/40HQ	
Cable (Including connector)	4.0mm ² , Portrait: 350mm(+)/350mm(-) Landscape: 1400mm(+)/1400mm(-)	
No. of Cells	144 (6×24)	
Glass	3.2mm High Transmission, Antireflection Coating	
Junction box	IP68, 3 Bypass Diodes	
Connector	MC4 Compatible	

OPERATING PARAMETERS

Maximum system voltage	1000V/1500V DC
Operating Temperature	-40 ~ +85°C
Maximum series fuse rating	20A
Snow load, frontside	5400Pa
Wind load, backside	3600Pa
Nominal operating cell temperature	45°C±2°C
Application level	Class A

ELECTRICAL CHARACTERISTICS(STC)

MODULE TYPE	ZH(520-550)-144M						
Maximum Power (P _{max})	520W	525W	530W	535W	540W	545W	550W
Open-circuit Voltage (V _{oc})	49.0V	49.2V	49.4V	49.6V	49.8V	50.0V	50.2V
Maximum Power Voltage (V _{mp})	41.2V	41.4V	41.6V	41.8V	42.0V	42.2V	42.4V
Short-circuit Current (I _{sc})	13.42A	13.48A	13.54A	13.60A	13.66A	13.72A	13.78A
Maximum Power Current (I _{mp})	12.62A	12.68A	12.74A	12.80A	12.86A	12.91A	12.97A
Module Efficiency (%)	20.12%	20.31%	20.51%	20.70%	20.89%	21.09%	21.28%
Power Tolerance	0~+5W						
Temperature Coefficient of I _{sc}	0.05%/°C						
Temperature Coefficient of V _{oc}	-0.31%/°C						
Temperature Coefficient of P _{max}	-0.35%/°C						

Standard Test Environment : Irradiance 1000W/m², Cell temperature 25°C, Spectrum AM1.5

ELECTRICAL CHARACTERISTICS(NOCT)

MODULE TYPE	ZH(520-550)-144M						
Maximum Power (P _{max})	387W	391W	394W	398W	402W	405W	409W
Open-circuit Voltage (V _{oc})	46.0V	46.1V	46.3V	46.5V	46.7V	46.9V	47.1V
Maximum Power Voltage (V _{mp})	38.6V	38.8V	39.0V	39.2V	39.4V	39.6V	39.8V
Short-circuit Current (I _{sc})	10.84A	10.89A	10.94A	10.99A	11.04A	11.09A	11.13A
Maximum Power Current (I _{mp})	10.01A	10.06A	10.11A	10.15A	10.20A	10.24A	10.29A

Standard Test Environment : Irradiance 800W/m², Ambient temperature 20°C, Spectrum AM1.5, Wind speed 1m/s