

# Mono Perc

## ZH(475-505)-132M

Half-Cell High Efficiency PV Module

Max Module Efficiency: 21.27%

### KEY FEATURES

- Excellent module efficiency up to:21.27%
- 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

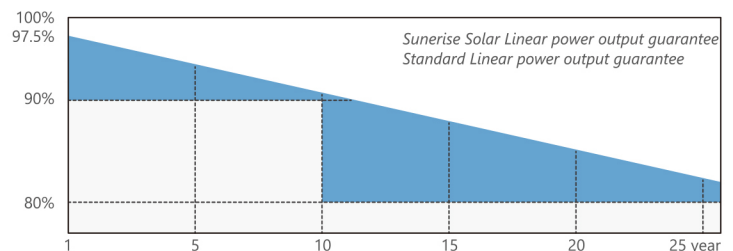
ISO 14001: 2015/Standards for environmental management system

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

### WARRANTY

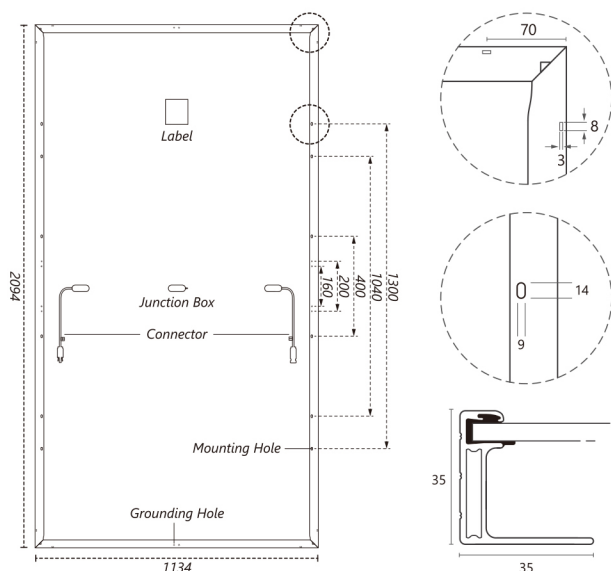
- 30 years** Linear power output warranty
  - \*12 years minimum 92% power output
  - \*30 years minimum 83% power output

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



# ZH(475-505)-132M

## DESIGN



## MECHANICAL SPECIFICATION

Cell Type	Dimension (L×W×T)	Weight
Mono 182×91mm	2094×1134×35mm	26.5kg
Packing	31pcs/pallet, 682pcs/40HQ	
Cable (Including connector)	4.0mm <sup>2</sup> , Portrait: 350mm(+)/350mm(-) Landscape: 1400mm(+)/1400mm(-)	
No. of Cells	132 (6×22)	
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(475-505)-132M						
Maximum Power (Pmax)	475W	480W	485W	490W	495W	500W	505W
Open-circuit Voltage (Voc)	44.8V	45.0V	45.2V	45.4V	45.6V	45.8V	46.0V
Maximum Power Voltage (Vmp)	37.6V	37.9V	38.1V	38.3V	38.5V	38.7V	38.9V
Short-circuit Current (Isc)	13.42A	13.48A	13.54A	13.60A	13.66A	13.72A	13.78A
Maximum Power Current (Imp)	12.62A	12.68A	12.74A	12.80A	12.86A	12.91A	12.97A
Module Efficiency (%)	20.00%	20.21%	20.42%	20.64%	20.85%	21.06%	21.27%
Power Tolerance	0~+5W						
Temperature Coefficient of Isc	0.05%/°C						
Temperature Coefficient of Voc	-0.31%/°C						
Temperature Coefficient of Pmax	-0.35%/°C						

Standard Test Environment : Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, Spectrum AM1.5

## ELECTRICAL CHARACTERISTICS(NOCT)

MODULE TYPE	ZH(475-505)-132M						
Maximum Power (Pmax)	353W	357W	361W	365W	368W	372W	376W
Open-circuit Voltage (Voc)	42.0V	42.2V	42.4V	42.6V	42.8V	43.0V	43.1V
Maximum Power Voltage (Vmp)	35.3V	35.5V	35.7V	35.9V	36.1V	36.3V	36.5V
Short-circuit Current (Isc)	10.84A	10.89A	10.94A	10.99A	11.04A	11.09A	11.13A
Maximum Power Current (Imp)	10.01A	10.06A	10.11A	10.15A	10.20A	10.24A	10.29A

Standard Test Environment : Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Spectrum AM1.5, Wind speed 1m/s