



## KEY FEATURES



Excellent module efficiency up to:18.42%



IP68 junction box for long-term weather endurance



Heavy snow loading up to 5400 Pa, wind loading up to 2400 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



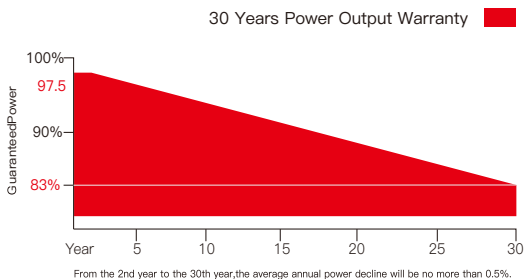
## WARRANTY



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



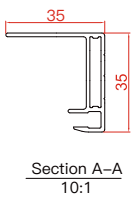
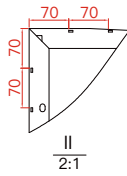
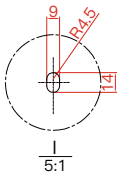
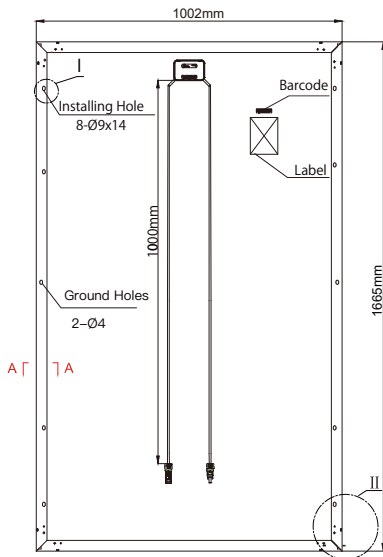
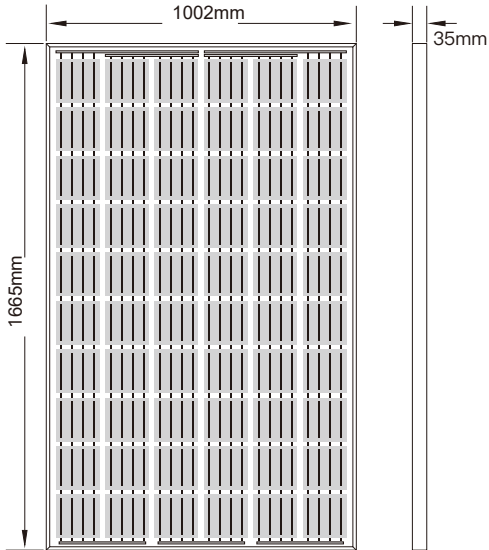
Product warranty on materials and workmanship  
According to the applicable Einnova Solarline Limited Warranty Statement



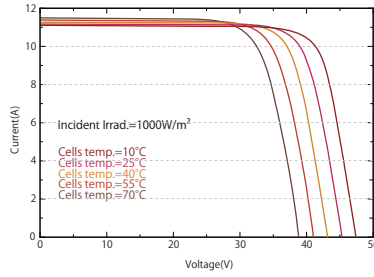
# Einnova Solarline

*invented for solar*

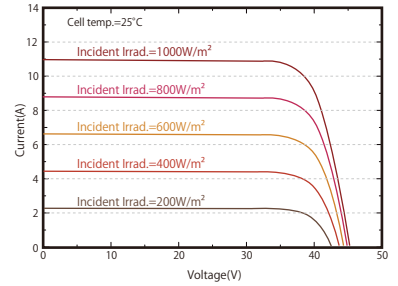
## DIMENSIONS OF PV MODULE (unit:mm)



I-V Curve at Different Temperature



I-V/P-V Curve at Different Irradiation



ELECTRICAL DATA@STC	ESP-280	ESP-285	ESP-290	ESP-295	ESP-300
Pmax(with tolerance) [W]	280	285	290	295	300
Module Efficiency-ηm(%)	17.21	17.52	17.82	18.12	18.42
IOpen Circuit Voltage (Voc)	38.20	38.30	38.40	38.50	38.60
Short Circuit Current (Isc)	9.45	9.49	9.53	9.57	9.61
IMaximum Power Voltage (Vmp)	31.40	31.50	31.60	31.70	31.80
Maximum Power Current (Imp)	8.92	9.05	9.17	9.30	9.43
Maximum System Voltage	ICE 1500VDC				
STC:Irradiance:1000W/m²,Module Temperature:25°C,Air Mass:1.5					

ELECTRICAL DATA@NOCT	ESP-280	ESP-285	ESP-290	ESP-295	ESP-300
Pmax[W]	209.36	213.08	<b>216.63</b>	220.36	223.80
Vmp [V]	29.26	29.36	<b>29.46</b>	29.56	29.66
Imp [A]	7.15	7.26	<b>7.35</b>	7.45	7.54
Voc[V]	35.79	35.89	<b>35.99</b>	36.09	36.19
Isc[A]	7.65	7.68	<b>7.71</b>	7.75	7.79
NOCT:Irradiance:800W/m², Ambient Temperature:20°C,Air Mass:1.5,Wind Speed:1m/s					

### MECHANICAL SPECIFICATIONS

Solar Cell Type	Poly Crystalline
Number of Cells	60pcs (10x6)
Module Size	1665*1002*35mm
Weight	18.0kg
Glass	3.2mm tempered glass
Back Sheet	White or Black
Frame	Anodized aluminium alloy,silver or black
Junction Box	IP68
Quantity of Diodes	3pcs
Cable	4.0mm² 1000mm
Connector	MC4 Compatible
Wind/Snow Load	2400pa/5400pa

### TEMPERATURE CHARACTERISTIC

NMOT (Nominal Module Operating Temperature)	45°C (±2°C)
Temperature Coefficient of Pmax	- 0.41%/°C
Temperature Coefficient of Uoc	- 0.32%/°C
Temperature Coefficient of Isc	0.05%/°C

### PACKAGING CONFIGURATION

Modules per box:	30 pieces
Number per 20GP:	360 pieces
Modules per 40' HQ:	910 pieces

### MAXIMUM RATINGS

Operational Temperature	-40 to +85°C
Maximum System Voltage	1500V DC(IEC)
Max Series Fuse Rating	15A
Protection Class	Class II
Snow Loading	5400 Pa
Wind Loading	2400 Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

\*design load with safety factor 1.5  
(DO NOT connect Fuse in Combiner Box with two or more strings in parallel connection)