EN158P-120- 285/290/295/300/305W

Polycrystalline Solar Module
120 Half-Cell Series



ABOUT ECONESS ENERGY

Established in 2009 by Jiangsu Huadong Group (founded in 1997), Econess Energy is a professional solution provider for solar energy. With current annual production capacity of 1 GW cells and 3GW modules, Econess Energy now distributes its PV products to over 36 countries. As a strong, bankable partner, we are committed to building strategic, mutually beneficial collaboration with installers and developers.

KEY FEATURES

Maximize limited space
Half cell structure technology (low resistance characteristics), more Internal reflection,Module maximum power output 305W

Significantly reduce the hot spot effect
Unique circuit design significantly reduces hot spot temperature and power loss

IP68 junction box
The highest waterproof level

Excellent Anti-PID performance
2 times of industry standard Anti-PID test by TUV

Lower temperature coefficients
Enhance power generation

Certified to withstand the most challenging environmental conditions
2400 Pa wind load · 5400 Pa snow load · 25mm hail stones at 82 km/h

SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730
- ISO 9001 : 2015 Quality Management System
- ISO 14001 : 2015 Environment Management System
- ISO 45001 : 2018 Occupational Health and Safety Management System

QUALITY WARRANTY

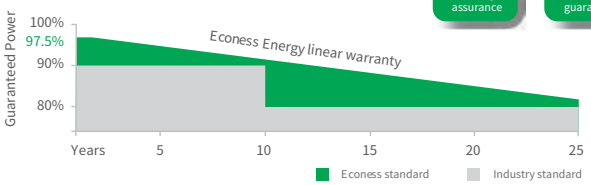
Econess Energy guarantees that defects will not appear in materials and workmanship defined by IEC61215 or IEC61730 under normal installation, use and maintenance as specified in Econess Energy's installation manual for 10 years from the warranty starting date.

PERFORMANCE WARRANTY

Polycrystalline Solar Module

10 years — Quality assurance

25 years — Power output guarantee



ELECTRICAL PARAMETERS

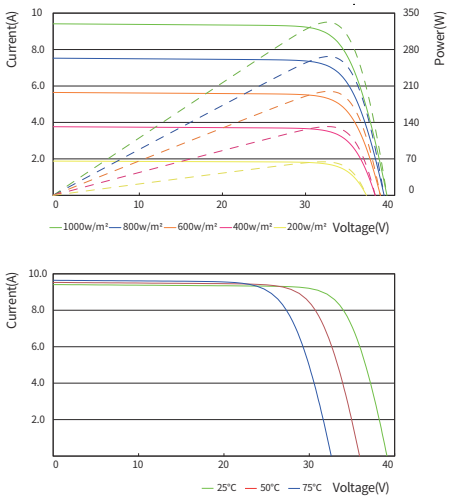
Performance at STC (Power Tolerance 0 - +3%)					
Maximum Power(Pmax/W)	285	290	295	300	305
Operating Voltage (Vmpp/V)	32.33	32.64	32.91	33.20	33.52
Operating Current(Impp/A)	8.82	8.89	8.97	9.04	9.10
Open-Circuit Voltage (Voc/V)	39.31	39.60	39.89	40.19	40.49
Short-Circuit Current(Isc/A)	9.30	9.36	9.44	9.51	9.57
Module Efficiency ηm (%)	16.81	17.11	17.40	17.70	17.99
Performance at NMOT					
Maximum Power(Pmax/W)	210	214	217	221	225
Operating Voltage(Vmpp/V)	29.65	29.98	30.19	30.57	30.86
Operating Current(Impp/A)	7.09	7.14	7.19	7.23	7.29
Open-Circuit Voltage(Voc/V)	36.18	36.43	36.67	36.93	37.18
Short-Circuit Current(Isc/A)	7.54	7.59	7.63	7.67	7.74

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s

MECHANICAL SPECIFICATION

Cell Type	Poly-crystalline · 9BB
Cell Dimensions	158.75x158.75mm
Cell Arrangement	120 [2 x (10 x 6)]
Weight	21kg (46.30 lb)
Module Dimensions	1692 x 1002 x 35 mm (66.61 x 39.45 x 1.38 inch)
Cable Length	300 mm (11.81 inch)
Cable Cross Section Size	4 mm² (0.006 sq.in)
Front Glass	3.2 mm High Transmission, Tempered Glass
No.of Bypass Diodes	3/6
Packing Configuration (1)	31pcs/Pallet, 806pcs/40hq
Packing Configuration (2)	31pcs+4pcs/Pallet, 858pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated

I-V CURVE



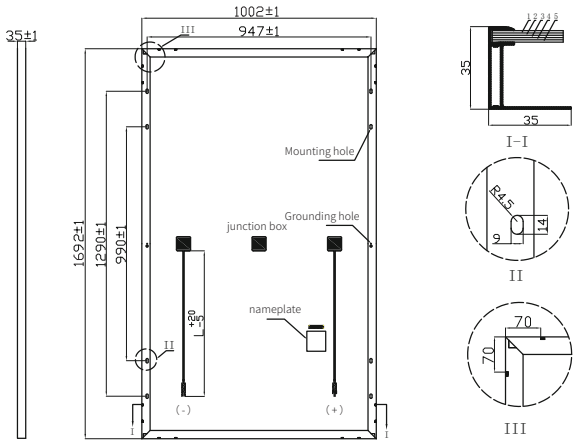
OPERATING CONDITIONS

Maximum System Voltage	1000V (IEC) DC / 1500V (IEC) DC
Operating Temp	-40°C ~ +85°C
Maximum Series Fuse	15 A
Static Loading	5400 Pa
Conductivity at Ground	⩽ 0.1Ω
Safety Class	II
Resistance	⩾ 100MΩ
Connector	MC4 Compatible

TEMPERATURE COEFFICIENT

Temperature Coefficient(Pmax)	-0.40%/°C
Temperature Coefficient(Voc)	-0.31%/°C
Temperature Coefficient(Isc)	+0.06%/°C
NMOT	45±2°C

TECHNICAL DRAWINGS (mm)



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* This is preliminary datasheet and for reference only. The specifications and key features contained in this datasheet may deciate slightly from our actual products due to the on-going innovation and product enhancement.Econess Energy reserves the right to make necessary adjustment to the information describrd herein at any time without further notice.