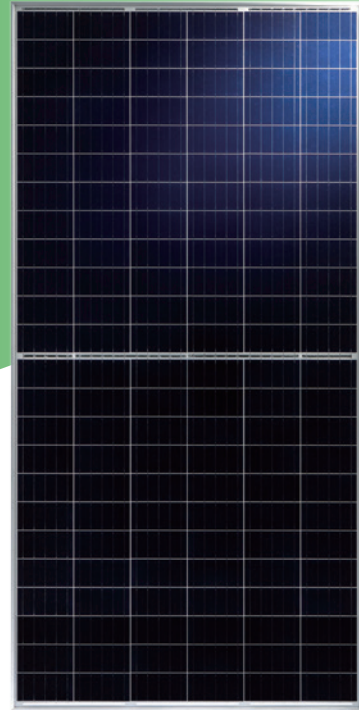


# EN156P-144- 325/330/335/340/345W







## Polycrystalline Solar Module 144 Half-Cell Series

### ABOUT ECONESS ENERGY

Established in 2009 by Jiangsu Huadong Group (founded in 1997), Econess Energy is a world's leading 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 345W
- 
**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

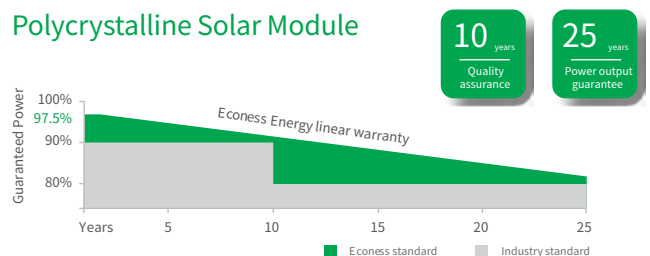


### QUALITY WARRANTY

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



## ELECTRICAL PARAMETERS

### Performance at STC (Power Tolerance 0 - +3%)

Maximum Power(Pmax/W)	325	330	335	340	345
Operating Voltage (Vmpp/V)	37.43	37.73	38.04	38.31	38.55
Operating Current (Impp/A)	8.69	8.75	8.81	8.88	8.95
Open-Circuit Voltage (Voc/V)	45.71	45.90	46.23	46.44	46.68
Short-Circuit Current (Isc/A)	9.23	9.29	9.33	9.40	9.48
Module Efficiency $\eta$ m (%)	16.38	16.63	16.89	17.14	17.39

### Performance at NMOT

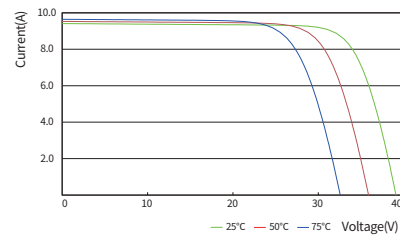
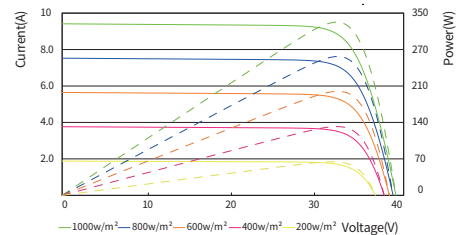
Maximum Power(Pmax/W)	240	243	247	251	255
Operating Voltage (Vmpp/V)	34.34	34.45	34.84	35.06	35.37
Operating Current (Impp/A)	6.99	7.05	7.10	7.16	7.21
Open-Circuit Voltage (Voc/V)	42.16	42.28	42.55	42.74	42.98
Short-Circuit Current (Isc/A)	7.47	7.52	7.56	7.62	7.66

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s

## MECHANICAL SPECIFICATION

Cell Type	Half-Cell · Poly
Cell Dimensions	6 inch
Cell Arrangement	144 (6 x 24)
Weight	23 kg (50.71 lb)
Module Dimensions	2000 x 992 x 40 mm (78.74 x 39.06 x 1.5 7 inch)
Cable Length	300 mm (11.81 inch)
Cable Cross Section Size	4 mm <sup>2</sup> (0.006 sq.in)
Front Glass	3.2 mm High Transmission, Tempered Glass
No.of Bypass Diodes	3/6
Packing Configuration (1)	27pcs/Pallet, 594pcs/40hq
Packing Configuration (2)	27pcs+4pcs/Pallet, 638pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

## I-V CURVE



## OPERATING CONDITIONS

Maximum System Voltage	1000V (IEC) DC / 1500V (IEC) DC
Operating Temp	-40°C ~ +85°C
Maximum Series Fuse	15A / 20A
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)

