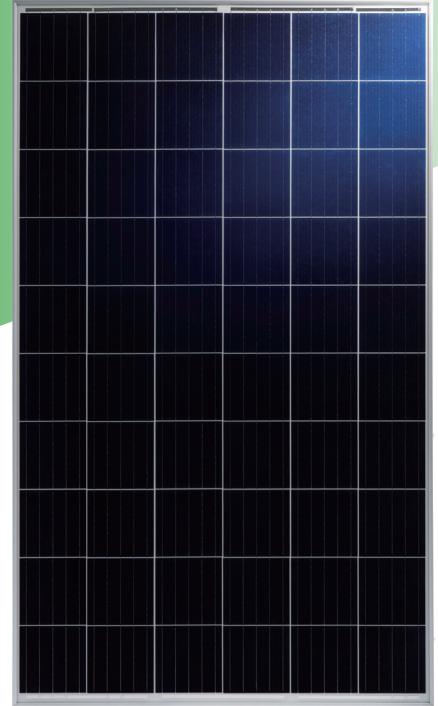


# EN156P-60S-265/270/275/280W






Smart Polycrystalline Solar Module  
60-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 annual production capacity of 800MW cells and 1.2GW modules. Econess Energy now distributes its PV products to over 36 countries with cumulative module shipment of 3GW. As a strong, bankable partner, we are committed to building strategic, mutually beneficial collaboration with installers and developers.



## KEY FEATURES

-  **Maximize limited space**  
Maximum power output 280W
-  **IP68 junction box**  
The highest waterproof level
-  **Excellent Anti-PID performance**  
2 times of industry standard  
Anti-PID test by TUV
-  **Certified to withstand the most challenging environmental conditions**  
2400 Pa wind load · 5400 Pa snow load · 25mm hail stones at 82 km/h
-  **Smart Module**  
By module data collecting, it can realise the real-time monitoring, high-temp alarm and remote failure diagnosis

## SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 1703
- ISO 9001 : 2015 Quality Management System
- ISO 14001 : 2015 Environment Mangement System
- OHSAS 18001 : 2007 Occupational Health and Safety Management System



## QUALITY WARRANTY

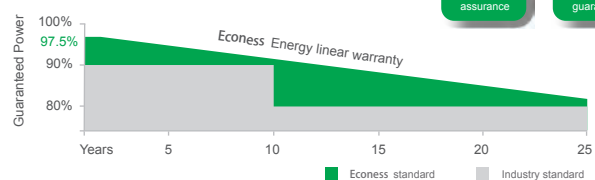
ECONESS Energy guarantees that defects will not appear in materials and workmanship defined by IEC61215, IEC61730 or UL1703 under normal installation, use and maintenance as specified in Econess Energy's installation manual for 10 years from the warranty starting date.

## 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)	265	270	275	280
Operating Voltage (Vmpp/V)	31.04	31.35	31.71	32.05
Operating Current(Imp/A)	8.55	8.62	8.68	8.75
Open-Circuit Voltage (Voc/V)	38.22	38.51	38.69	39.02
Short-Circuit Current(Isc/A)	9.04	9.09	9.16	9.24
Module Efficiency $\eta_m$ (%)	16.19	16.50	16.80	17.11

### Performance at NMOT

Maximum Power(Pmax/W)	196	199	203	207
Operating Voltage(Vmpp/V)	28.66	28.83	29.12	29.37
Operating Current(Imp/A)	6.84	6.91	6.98	7.05
Open-Circuit Voltage(Voc/V)	35.18	35.47	35.63	35.93
Short-Circuit Current(Isc/A)	7.33	7.37	7.43	7.50

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	Poly
Cell Dimensions	156.75*156.75 mm (6 inch)
Cell Arrangement	60 (6*10)
Weight	18 kg (39.7 lbs)
Module Dimensions	1650*992*35 mm (64.96*39.06*1.38 inch)
Cable Length	900 mm (47.24 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
Packing Configuration (1)	31 pcs/Pallet, 868 pcs/40hq
Packing Configuration (2)	31 pcs+4pcs/Pallet, 924 pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP 68

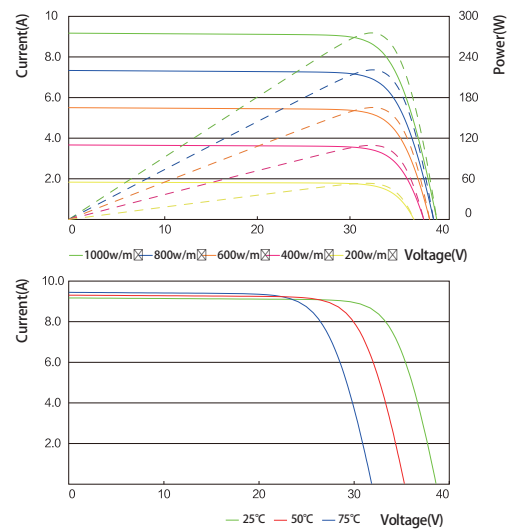
## OPERATING CONDITIONS

Maximum System Voltage	1000V/DC(IEC)/1 500V/DC(IEC)
Operating Temp	-40°C - +85°C
Maximum Series Fuse	15 A
Static Loading	5400 Pa
Conductivity at Ground	≤ 0.1 Ω
Safety Class	II
Resistance	≥ 100 MΩ
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

## I-V CURVE



## TECHNICAL DRAWINGS

