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# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

**ABi-Solar Inc**

**AB-60P**

**AB285-60P**

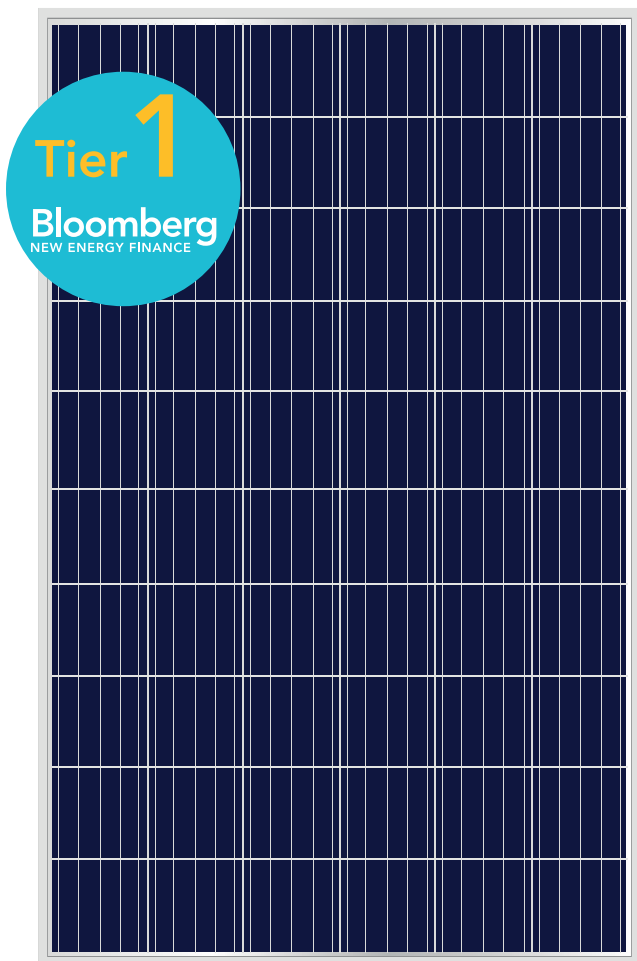
Also available on the web at  
[EnergyPal.com/abi-solar-inc-solar-panels/ab285-60p](http://EnergyPal.com/abi-solar-inc-solar-panels/ab285-60p)

# AB-60P

60 (6×10) 156.75×156.75mm

270W  
275W  
280W  
285W

## Polycrystalline PV modules



Power tolerance (0~+4.99%) to ensure the high reliability of power output



Modules certified by TÜV to withstand high level of wind loads (2400 Pa) and snow loads (5400 Pa)



Special PV Module Insurances by world leading insurance company guarantees the benefit of PV investors and PV module users



Junction box and bypass diodes guarantee the modules free of overheating and "hot spot effect"

### WHY ABI-SOLAR?

- Manufacturing and assembly of PV modules are performed only on East Asian enterprises from **Bloomberg Tier 1** list.
- PV modules are tested and demonstrate high reliability in various climatic conditions and in a wide range of insolation.
- High efficiency and return on investment guaranteed around the world.
- Modules certified by global testing facilities: IEC61215, IEC61730, CE, ROHS, TÜV.
- Manufacturing with international quality standards and environmental management system: ISO9001 and ISO14001.
- Maximum power and performance at minimal price ensure fast return of investments.
- Compatibility with both on-grid and off-grid PV systems guaranteed.

**10**

**YEAR**

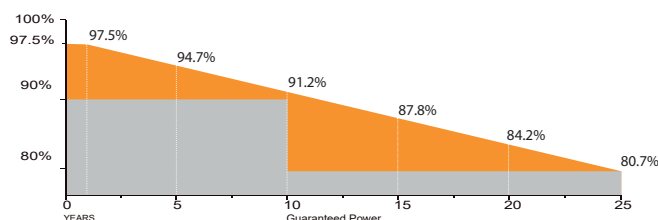
Manufacturing Warranty

**25**

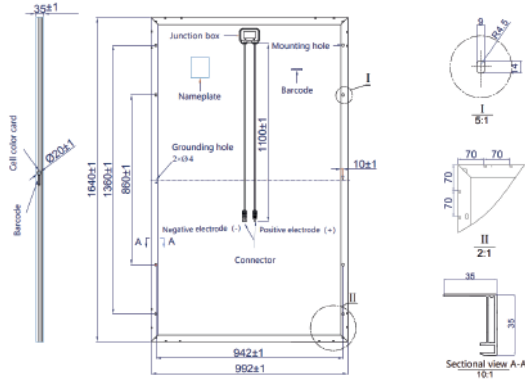
**YEAR WARRANTY**

80% Power Output

### INDUSTRY-LEADING WARRANTY BASED ON NOMINAL POWER



## MECHANICAL DRAWINGS



## MECHANICAL SPECIFICATIONS

Cell type	Polycrystalline
Number of cell	60 (6×10)
Dimensions (A×B×C)	1640×992×35 mm
Weight	17.5 kg
Front glass	3.2mm AR tempered glass, low iron
Frame	Anodized aluminium alloy
Junction Box	IP67
Connector	MC4 Compatible
Output cables	4.0 mm <sup>2</sup> , wire length: 1100 mm
Maximum snow load (IEC 61215)	5400Pa

## ELECTRICAL CHARACTERISTICS (STC)

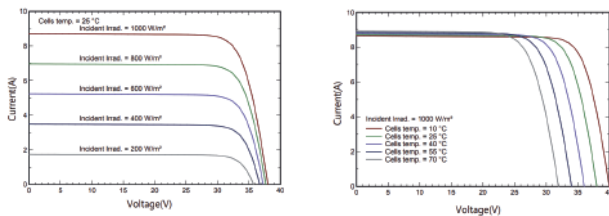
	AB270-60P	AB275-60P	AB280-60P	AB285-60P
Maximum Power (P <sub>max</sub> )	270W	275W	280W	285W
Shot Circuit Current (I <sub>sc</sub> )	8.99A	9.08A	9.18A	9.27A
Open Circuit Voltage (V <sub>oc</sub> )	38.1V	38.3V	38.5V	38.7V
Maximum Power Current (I <sub>mp</sub> )	8.63A	8.71A	8.81A	8.91A
Maximum Power Voltage (V <sub>mpp</sub> )	31.3V	31.6V	31.8V	32.0V
Module Efficiency	16.6%	16.9%	17.2%	17.5%
Power Tolerance	(0~+5W)			
Maximum System Voltage	1000V / 1500V DC(IEC)			
Maximum Series Fuse	20A			

## NOCT

	AB270-60P	AB275-60P	AB280-60P	AB285-60P
Maximum Power (P <sub>max</sub> )	200W	204W	208W	212W
Shot Circuit Current (I <sub>sc</sub> )	7.26A	7.35A	7.44A	7.53A
Open Circuit Voltage (V <sub>oc</sub> )	35.2V	35.4V	35.6V	35.8V
Maximum Power Current (I <sub>mp</sub> )	6.85A	6.94A	7.03A	7.12A
Maximum Power Voltage (V <sub>mpp</sub> )	29.2V	29.4V	29.6V	29.8V

STC irradiance: 1000 W/m<sup>2</sup> module temperature: +25 °C AM=1.5 NOCT irradiance: 800 W/m<sup>2</sup> module temperature: +20 °C AM=1.5

## I-V curves



## TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	45±2 °C
Temperature Coefficient of P <sub>max</sub>	-0,41 %/°C
Temperature Coefficient of V <sub>oc</sub>	-0,32 %/°C
Temperature Coefficient of I <sub>sc</sub>	0.050 %/°C
Operating Temperature	-40~+85 °C

## PACKING CONFIGURATION

	1640x 992x 35 mm		
Container	20GP	40GP	40HC
Pieces per Pallet	30	30	30
Pallets per Container	14	28	28
Pieces per Container	400	840	924

## QUALIFICATIONS AND CERTIFICATES

