

# AB280-60P

60 (6×10) 156.75×156.75mm

### 280W 285W 290W

### Polycristaline PV modules





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



Modules sertified by TÜV to with stand 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 diods guarantee the modules free of overheating and "hot spot effect"

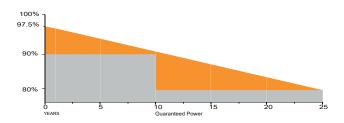
#### **WHY ABI-SOLAR?**

- 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 sertified by global testing facilities: IEC61215, IEC61730, CE, ROHS, TÜV.
- Manufacturing with international quality standarts and environment management system: ISO9001 and ISO14001.
- Maximum power and performance at minimal price ensure fast return of investments.
- Compatability with both on-grid and off-grid PV systems garateed.

YEAR
Manufacturing Warranty

YEAR WARRANTY 80% Power Output

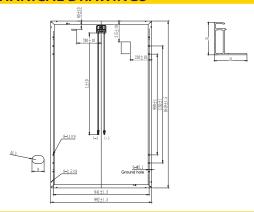
#### INDUSTRY-LEADING WARANTY BASED ON NOMINAL POWER





## AB280-60P

#### **MECHANICAL DRAWINGS**



| MECHANICAL SPECIFICATIONS            |                                  |  |
|--------------------------------------|----------------------------------|--|
| Cell type                            | Polycrystalline                  |  |
| Number of cell                       | 60 (6×10)                        |  |
| Dimensions ( $A \times B \times C$ ) | 1640×992×35 mm                   |  |
| Weight                               | 18.5 kg                          |  |
| Font glass                           | High transmission tempered glass |  |
| Frame                                | Anodized aluminium alloy         |  |
| Junction Box                         | IP67                             |  |
| Connector                            | MC4/MC4 Compatible               |  |
| Output cables                        | 4.0 mm <sup>2</sup> (IEC)        |  |
| Maximum snow load<br>(IEC 61215)     | 5400Pa                           |  |

#### **ELECTRICAL CHARACTERISTICS (STC)**

|                              | AB280-60P | AB285-60P             | AB290-60P |
|------------------------------|-----------|-----------------------|-----------|
| Maximum Power (Pmax)         | 280W      | 285W                  | 290W      |
| Shot Circuit Current (Isc)   | 9.25A     | 9.42A                 | 9.49A     |
| Open Circuit Voltage (Voc)   | 38.4V     | 39.2V                 | 39.4V     |
| Maximum Power Current (Impp) | 8.52A     | 8.81A                 | 8.86A     |
| Maximum Power Voltage (Vmpp) | 32.9V     | 32.4V                 | 32.8V     |
| Module Efficiency            | 17.21%    | 17.52%                | 17.83%    |
| Power Tolerance              |           | (0~+5W)               |           |
| Maximum System Voltage       |           | 1000V / 1500V DC(IEC) |           |
| Maximum Series Fuse          |           | 15A                   |           |

#### **NOCT**

|                              | AB280-60P | AB285-60P | AB290-60P |
|------------------------------|-----------|-----------|-----------|
| Maximum Power (Pmax)         | 205W      | 209W      | 213W      |
| Shot Circuit Current (Isc)   | 7.47A     | 7.61A     | 7.67A     |
| Open Circuit Voltage (Voc)   | 35.6V     | 36.3V     | 36.5V     |
| Maximum Power Current (Impp) | 6.75A     | 6.98A     | 7.02A     |
| Maximum Power Voltage (Vmpp) | 30.4V     | 30.0V     | 30.4V     |

STC irradiance: 1000 W/m² module temperature: +25 °C AM=1.5 NOCT irradiance: 800 W/m² module temperature: +20 °C AM=1.5

Current-Voltage & Power-Voltage Curve

280 1000 W/m² 230 800 W/m² 1184 2 300 W/m² 138 300 W/m² 92 46 0 Voltage (V)

#### TEMPERATURE CHARACTERISTICS

| Nominal Operating Cell Temperature (NOCT) | 45±2 °C     |
|---|-------------|
| Temperature Coefficient of Pmax           | -0,41 %/°C  |
| Temperature Coefficient of Voc            | -0,32 %/°C  |
| Temperature Coefficient of Isc            | 0.050 % /°C |
| Operating Temperature                     | -40~+85 °C  |

#### **PACKING CONFIGURATION**

|                       | 1640x 992x 35 mm |
|-----------------------|------------------|
| Container             | 40'HQ            |
| Pieces per Pallet     | 30               |
| Pallets per Container | 28               |
| Pieces per Container  | 840              |

#### **QUALIFICATIONS AND CERTIFICATES**















