

# TPL SOLAR MODULE

TPL P-36 Series 135W-160W



**EU Brand & Warranty**



**High Efficiency**

High module conversion efficiency (up to 16.8%), through innovative manufacturing technology.



**Low-Light Performance**

Advanced glass and solar cell surface texturing allow for excellent performance in low-light environments



**Severe Weather Resilience**

Certified to withstand : wind Load (2400 Pascal) And Snow Load (5400 Pascal)



**4 Busbar Solar Cell**

4 busbar solar cell adopts new technology to improve the efficiency of modules , offers a better aesthetic appearance.



**Superior Quality Control**

Full automatic production line  
ISO9001:2008 quality management system  
100% three times EL and appearance inspection



**Plus tolerance**

0-+5W positive power tolerance guarantees the highest system efficiency and yield stability



**Performance Guarantee**

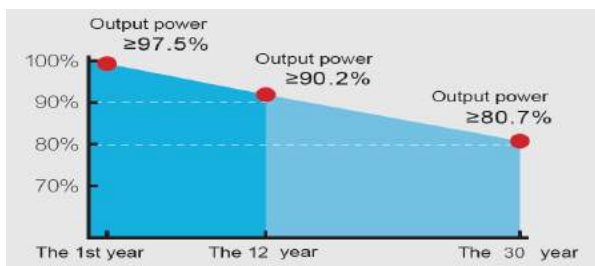
With the linear performance guarantee of 30 years and a product warranty of 12 years, TPL Solar guarantees highest investment security and warranty claims.



**Certificates**

TPL Solar modules are CE and TUV certified. Meet Australia CEC standard and on CEC list. Fire safety Class C

## Performance Assurance



EN 61215:2005  
EN 61730-1:2007/A2:2013  
EN 61730-2:2007/A1:2012



**TPL ENERGY CO., LIMITED**  
**(TPL SOLAR)**

E-Mail: [info@tplsolar.com](mailto:info@tplsolar.com)

Web: [www.tplsolar.com](http://www.tplsolar.com)

### ELECTRICAL DATA

|                       |         | TPL135P-36 | TPL140P-36 | TPL145P-36 | TPL150P-36 | TPL155P-36 | TPL160P-36 |
|-----------------------|---------|------------|------------|------------|------------|------------|------------|
| Nominal power         | Pm (Wp) | 135        | 140        | 145        | 150        | 155        | 160        |
| Open circuit voltage  | Voc (V) | 20.67      | 21.12      | 21.44      | 22.03      | 22.64      | 23.12      |
| Short-circuit current | Isc (A) | 8.71       | 8.84       | 9.02       | 9.08       | 9.13       | 9.19       |
| Voltage at max power  | Vmp (V) | 17.13      | 17.57      | 17.58      | 18.03      | 18.26      | 18.78      |
| Current at max power  | Imp (A) | 7.88       | 7.97       | 8.25       | 8.32       | 8.49       | 8.52       |
| Module efficiency     | (%)     | 13.61      | 14.12      | 14.62      | 15.13      | 15.63      | 16.14      |
| Cells efficiency      | (%)     | 15.57      | 16.14      | 16.72      | 17.29      | 17.87      | 18.45      |
| System Voltage        | (V)     | 1000       |            |            |            |            |            |
| Temp. coefficient Voc | (%; °C) | -0.36      |            |            |            |            |            |
| Temp. coefficient Isc | (%; °C) | 0.06       |            |            |            |            |            |
| Temp. coefficient Pm  | (%; °C) | -0.36      |            |            |            |            |            |
| Operating temp.       | (°C)    | -40 to +85 |            |            |            |            |            |
| NOCT                  | (°C)    | 45±2       |            |            |            |            |            |

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

### TECHNICAL DATA

|  |                                 |
|--|---------------------------------|
| Junction box                             | 2 bypass diodes, IP67           |
| Wire cross section (Ø, mm <sup>2</sup> ) | 4.0                             |
| Cable length (mm)                        | 900                             |
| Connector type                           | MC4/MC4 compatible              |
| Dimensions (L x W x H, mm)               | 1480 x 670 x 35                 |
| Weight (kg)                              | 10.8                            |
| Cell dimensions (mm)                     | 156 x 156                       |
| No of cells / assembly                   | 36 / 4 x 9                      |
| Type of cells                            | poly-crystalline                |
| Hail resistance                          | Max. Ø 25 mm at 23 m/s          |
| Wind load                                | 2400Pa / 244kg / m <sup>2</sup> |
| Mechanical load                          | 5400Pa / 550kg / m <sup>2</sup> |

### DIMENSIONS

