

Polycrystalline 36 cells

# PLUTO



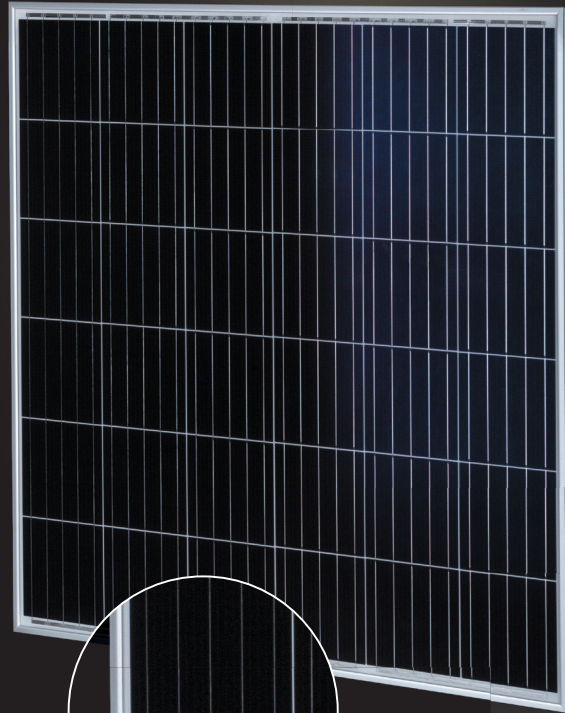
12 V



Guaranteed positive output selection 0 ~ +5 Wp by single measuring



3.2 mm anti-reflective glass



SILVER | WHITE



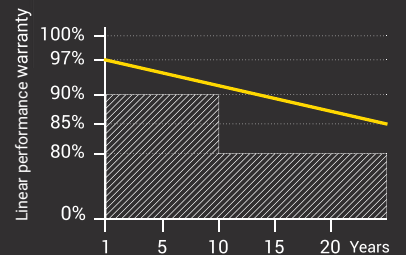
Maximum stability through aluminium soft grip frame



Maximum 5400 Pa snow load



15 years manufacturer's warranty  
25 years linear performance guarantee



## OUTPUT: 130 - 150 WATT

The PLUTO series 36-cell polycrystalline photovoltaic modules are simple to install, mount and commission. They can be used in all applications with a self-contained battery such as campers, bungalows and all off-grid systems. Thanks to the bypass diodes built into the junction box, the module continues to produce electricity even when it is shaded or in low light. It is stable even in extreme conditions because it is enclosed in a hollow chamber profile frame. Thanks to their anti-reflective glass, the PLUTO series modules let in a lot more light. The efficiency of their cells is 18.5%.



power for a better world

| STC                                 | A-P130/36 | A-P140/36 | A-P150/36 |
|-------------------------------------|-----------|-----------|-----------|
| Maximum Power (Pmax) (W)            | 130       | 140       | 150       |
| Open Circuit Voltage (Voc) (V)      | 22.90     | 22.99     | 23.09     |
| Short Circuit Current (Isc) (A)     | 7.35      | 7.87      | 8.39      |
| Voltage at Maximum Power (Vmpp) (V) | 18.70     | 18.80     | 18.97     |
| Current at Maximum Power (Impp) (A) | 7.12      | 7.45      | 7.92      |
| Module Efficiency (%)               | 16.11     | 17.35     | 18.59     |

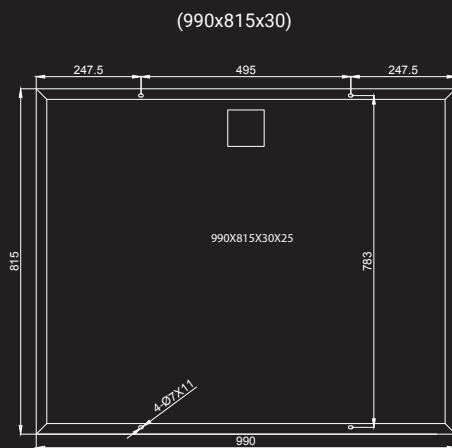
STC (Standard Testing Condition): Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25 °C, Spectra at AM 1.5; Test uncertainty tolerance for Pmax, Voc and Isc: ±3 %

#### Temperature Characteristics

|  |                 |
|--|-----------------|
| Pmax Temperature Coefficients (W / °C)       | -0.40 % / °C    |
| Voc Temperature Coefficients (V / °C)        | -0.33 % / °C    |
| Isc Temperature Coefficients (A / °C)        | +0.05 % / °C    |
| NMOT Nominal Operating Cell Temperature (°C) | 45 ±2 °C        |
| Operating Module Temperature                 | -40 °C ~ +85 °C |

#### Specifications

|                          |  |
|--------------------------|--|
| Cell Type                | Poly 5BB   |
| Weight                   | 9 kg ±3 %  |
| Dimensions               | 990x815x30 mm (±0.7 %)                                 |
| Cable Cross Section Size | 4 mm <sup>2</sup> , cable approx 30 cm, QC4 compatible |
| No. of cells             | 36 (6x6)   |
| Junction Box             | IP67, 3 diodes   |
| Frame                    | Silver anodized aluminium                              |
| Front glass              | 3.2 mm high transmission, low iron, tempered glass     |



I-V Curve: (A-P150)

