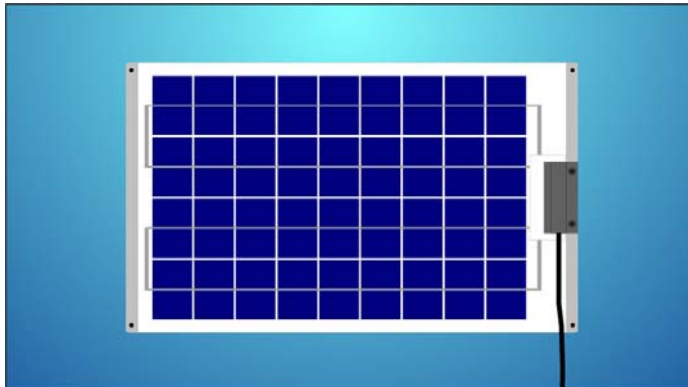


# Technical Description



## Photovoltaic Module NP22RSS

Product Code: 16122



**36 polycrystalline Si solar cells**

**Main application: boat deck PV systems**

### Module Electrical Performance under Standard Test Conditions

*Refers to standard test conditions of 1000 Wm<sup>-2</sup> solar irradiance, 25°C cell temperature, Air Mass 1.5.*

*Note: Maximum power point is subject to +10%/-5% variation. All other values are typical and for guidance only.*

Maximum Power Point: 22 Watts, 1.25 Amps at 17.6 Volts.

Short Circuit: 1.37 Amps. Open circuit: 22.0 Volts.

### Dimensions and Weight

*all dimensions +/- 2mm, weight approximately +/-0.3kg*

Length: 596mm. Width: 357mm. Thickness at edge: 3.67mm. Weight: 3.1kg

### Construction

Top cover material: Tefzel

Rear cover material: St.Steel1.5mm

Encapsulant (lamination material): EVA

Frame: no

2 factory-fitted bypass diodes

1 junction box type hat

cable 2m

### Integral mounting holes

Along length: 582mm centre to centre, 7mm centre to module edge.

4 holes, size 5.5mm.

Across width: 337mm centre to centre, 10mm centre to module edge.

### Cell circuit

Cut from full size cells into 1/6 of a cell

Cell dimensions: Length (tab direction) 52mm. Width: 78mm.

Electrical circuit: 36 cells in series

Cell layout: 4 rows, each row is 9 cells long.

### Normal Operating Cell Temperature (NOCT)

45°C

*error in measurement around +/- 2°C*

*Cell temperature at 800Wm<sup>-2</sup> solar irradiance, 20°C ambient temperature, wind speed <=1ms<sup>-1</sup>, free air access to rear.*

### Efficiencies based on Standard Test Conditions Rating

Module: 10.3%

Laminated area: 10.9%

Cells alone: 15.1%

*Note: Standard Test Conditions efficiency figures should only be used to compare one module with another. These efficiency figures do not apply to actual field performance, for which a careful analysis of operating conditions is necessary to determine the effects of module temperature and other factors.*

*Specifications may change due to Naps policy of continuous product improvement.*

*Please check current specification before purchasing.*

*Information last updated: 26-Nov-10*

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