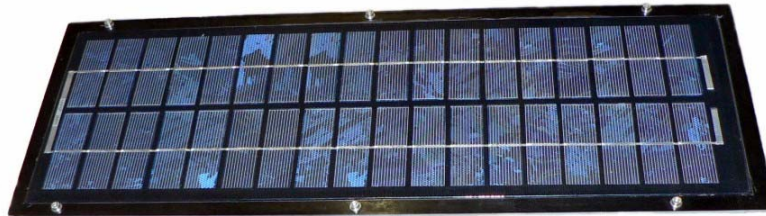


Technical Description



Photovoltaic Module NCV 12 TP1 PNB



36 polycrystalline Si solar cells

Main application: small 12V PV systems

Module Electrical Performance under Standard Test Conditions

Refers to standard test conditions of 1000 Wm^{-2} 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: 12 Watts, 0.64 Amps at 18.7 Volts.

Short Circuit: 0.71 Amps. Open circuit: 22.7 Volts.

Dimensions and Weight

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

Length: 592mm. Width: 211mm. Thickness at edge: 3.2mm. Weight: 1.0kg

Construction

Top cover material: Tefzel

Encapsulant (lamination material): EVA

Rear cover material: GFboard3mm

Frame: no

1 junction box type small

M12 connector (male)

Integral mounting holes

6 holes, size 5mm.

Along length: 239mm centre to centre, 57mm centre to module edge.

Across width: 198mm centre to centre, 7.5mm centre to module edge.

Cell circuit

Cut from full size cells into 1/12 of a cell

Cell dimensions: Length (tab direction) 26mm. Width: 78mm.

Electrical circuit: 36 cells in series

Cell layout: 2 rows, each row is 18 cells long.

Normal Operating Cell Temperature (NOCT)

45°C

error in measurement around +/- 2°C

Cell temperature at 800 Wm^{-2} solar irradiance, 20°C ambient temperature, wind speed $\leq 1 \text{ ms}^{-1}$, free air access to rear.

Efficiencies based on Standard Test Conditions Rating

Module: 9.6%

Laminated area: 11.5%

Cells alone: 16.4%

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.

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Please check current specification before purchasing.

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Naps Systems Oy, Ruosilankuja 7A, FI-00390 Helsinki, Finland

Tel +358 20 7545 666, Fax +358 20 7545 660, www.napssystem.com sales@napssystem.com