

Schoenau A.E. - Βενιζέλου 2 - 55133 Καλαμαριά / Θεσσαλονίκη

Έρχεται το φωτοβολταϊκό στοιχείο με την μεγαλύτερη απόδοση παγκοσμίως :
Sanyo HIP 240 HDE 4 με 20% Συντελεστής απόδοσης κυψέλης, 17,3% Συντελεστής απόδοσης
Φ/Β στοιχείου και -3,0%/°C Συντελεστή θερμοκρασίας

SANYO to Launch High Output HIT-HD Solar Modules in Europe :
240/235W HIT-HD Photovoltaic Modules SANYO's Highest Performance Panels

Munich, May 20, 2009 – SANYO Electric Co., Ltd. (SANYO) is pleased to announce the development of new 240W and 235W HIT-HD Photovoltaic Modules, with the highest output of any SANYO solar panel, based on performance improvement for the HIT-HD*1 series. The new modules are to begin mass production at SANYO Hungary Plant by October 2009. The new HIT-HD module will be on display at the Intersolar trade show being held in Munich, Germany, from May 27 to 29, 2009.

High Output 240/235W HIT-HD Photovoltaic Modules (HIT-240/235HDE4)

Greater output and efficiency through manufacturing process optimization

Previous SANYO solar panels had a maximum rated power output of 230 watts per module (i.e. HDE Series 230W). Now with this improved HIT-HD module, a rated power of 240 watts has been achieved through the optimization of the cell manufacturing process. A cell conversion efficiency of 20.0% has also been reached (module conversion efficiency of 17.3%), which is the highest efficiency for a mass-produced SANYO model.

Main Features

1. Material and installation costs can be reduced with low-voltage specifications

By lining up part of the cell connection circuits inside the module in parallel, SANYO has realized specifications with a lower voltage compared with previous models. Consequently, while the maximum system configuration for the previous model (NKHE series 215 W) was 13 panels in series per string with a system capacity of 3,65 kW for one string, the low-voltage specification HIT-HD module can now achieve a system configuration of 21 panels in series per string. This enables a system capacity for one string of 5.04 kW, which is an improvement of approximately 38 percent. As a result, the number of parallel circuits in the photovoltaic modules installed as part of a solar power system can be greatly reduced, which enables material and installation costs to be lowered.

- Previous model: HIP-215NKHE1 System Voltage 1,000V Voc 51.6V 17 panels in series / string

- HIT-HD: HIP-240HDE4 System Voltage 1,000V Voc 43.6V 21 panels in series / string

2. Unique Honeycomb Design means more effective silicon use

Cylinders of silicon ingots formed from raw material are sliced, and the resulting round wafers are used to make HIT cells. The wafers are then processed into an eight-sided honeycomb shape using SANYO's cell-cut technology, before being subdivided into four sections. Silicon use is maximized with this technique, unlike the previous method of cutting square ingots from silicon cylinders, in order to make square wafers for cell manufacturing.

3. High annual power output thanks to outstanding temperature performance

The HIT HD solar cells boast the same outstanding temperature performance as with previous HIT solar cells. With regular solar cells, output goes down when the temperature rises. With a HIT cell however, outstanding temperature performance means that the drop in output at higher temperatures is less pronounced, and high output can be obtained even during the hot summer. This results in high annual electrical output.