

# New Products in the Market

## Panasonic launches two new solar PV modules

Japan-based Panasonic has added two new photovoltaic (PV) modules, N245 and N240, to its existing series of HIT solar modules. The N245 and N240 modules have a rated power capacity of 245 W and 240 W. They comprise monocrystalline silicon cells, which are surrounded by ultra-thin amorphous silicon layers. The N245 and N240 modules have a cell efficiency of 22 per cent and 21.6 per cent respectively. They have an efficiency of 19.4 per cent and 19 per cent respectively.



The modules, which weigh 15 kg, have a length of 1.58 metres, a width of 0.798 metre and a thickness of 0.035 metre. In addition, they are coated with anti-reflective tempered glass, which provides protection against mechanical loads.

According to Panasonic, the modules have a low temperature coefficient of -0.29 per cent per °C, which enables them to maintain higher efficiency as compared to a conventional crystalline silicon solar cell. In addition, the drainage lines in the module frame allow for constant discharge of accumulated water, thereby checking humidity inside the modules. Panasonic offers a performance warranty of 90 per cent of power output for 10 years and 80 per cent for 20 years. It also provides 10 years of product workmanship.

## Tata Power launches solar power system

Tata Power Solar has launched a solar power system called TATA Dynamo. The system comprises four solar PV panels, a 1 kVA inverter and a 180 Ah battery.

Unlike other power systems, the TATA Dynamo can be mounted on the wall.

During the day-time, it uses solar energy for providing electricity and also for charging batteries. When sunlight is not available, it automatically shifts to grid power supply. According to the company, the TATA Dynamo system can provide backup of eight hours for power appliances such as light emitting diode lights and compact fluorescent lamps, fans, and televisions.



The company claims that the power system does not require operation and maintenance services and has a life expectancy of 8-10 years.



## Fronius introduces Galvo solar inverters

US-based Fronius has added the Galvo series to its existing portfolio of PV inverters. The Galvo string inverters have a rated capacity of 1.5 kW-3.1 kW and operate at frequencies of 50-60 Hz. While the inverters with a rating of less than 2 kW have a maximum power point (MPP) voltage range of 120-335 V, other inverters in the series have an MPP voltage range of 165-440 V.

The solar inverters have a height, width and depth of 64.5 cm, 43.1 cm and 20.4 cm respectively, and weigh 16.8 kg. The nominal operating temperature of the inverters is -25 to 50 °C. The Galvo 1.5, Galvo 2.0 and Galvo 3.0 have a maximum efficiency of 95.9 per cent, 96 per

cent and 96.1 per cent respectively. The company states that the Galvo inverters use a high frequency transformer, which has an automatic switchover facility. The transformer helps maintain efficiency levels across the input voltage range, thereby ensuring higher yields. The inverters also include a Type 1 arc-fault circuit interruptor, a ground-fault detector/interruptor, and a DC reverse-polarity protection facility.

The Galvo inverter is equipped with a data logger and WLAN interface for remote monitoring. Moreover, users can use the Fronius SolarWeb monitoring portal for hosting data during the operational life of the inverter. The inverters have an ingress protection rating of 55, which implies protection against solid objects and low pressure water jets from all directions.

## Trojan Battery and Su-Kam introduce battery for solar inverters

US-based technology company Trojan Battery in collaboration with Su-Kam Power Systems has launched a battery solution – Su-Kam/Trojan INV-150 – for solar inverters. The solution is suitable for both commercial and residential inverter systems with a voltage capacity of 250-500 kVA. The Su-Kam/Trojan INV-150 features Trojan's deep-cycle battery technology.



According to Trojan Battery, the solution uses T2 technology, the proprietary Alpha Plus Paste and the Maxguard separator to ensure high performance levels. The solution is targeted at commercial and residential users in India. ■