



SMA at Intersolar Europe 2010: Technological innovations for even easier usage, simple installation and reduced system costs.

Niestetal, May 19, 2010 - Among numerous other products SMA Solar Technology AG will be exhibiting the Sunny Tripower at the Intersolar Europe tradeshow (hall B4 - booth 230). The Sunny Tripower was already decorated with the Innovation Award at the Photovoltaic Solar Energy Symposium in Staffelstein, Germany for the unique technologies Optiflex and Optiprotect. The Sunny Tripower drastically simplifies the installation of large PV systems, is equipped with the brand new safety concept Optiprotect and will be available in the power classes 10, 12, 15 and 17 kVA. A further innovation that the company will present is the Sunny Boy 3000HF, a device from the new inverter generation with high-frequency transformer. Flexible for the plant design, highly efficient and easy to install: this is what makes the new solar inverter so special. It will be available starting mid 2010. The third SMA highlight at the Intersolar will be the Sunny Central 800CP. It can be installed outside without concrete housing and provides maximum power on smallest space. With the new and compact interior, the innovative technologies and the maximum efficiency of 98.7 % the new inverter series symbolizes reduced system costs and a simplified installation on the free field. The new central inverters are yet another milestone of the SMA technology development. SMA additionally announces a further innovation for the off-grid market: the new SMA multicluster technology makes it possible to set up modular PV hybrid systems with up to 300 kW output power for the first time.

Sunny Tripower: five unique innovations in one PV inverter from SMA

Additionally to the three-phase grid feeding and an efficiency of over 98 percent, SMA offers five unique technological innovations in the Sunny Tripower. They make the inverter even more user-friendly, safe and reduce system costs. The new three-phase Multi-String inverter features Optiflex which is a completely new concept for highly flexible plant configuration. Moreover, it is equipped with the unique multi security concept Optiprotect.

Optiflex stands for the combination of an extremely wide input voltage range with an asymmetrically dimensioned Multi-String input. Even with an exactly specified number of modules, Optiflex still offers variation possibilities in terms of the string lengths in such way that the inverter operates at its maximum efficiency for most of the time. Installers save a great deal of time for planning and installing, plant operators benefit from the reduced system costs. The Sunny Tripower is the first inverter to be equipped with the multi-level safety concept Optiprotect: It consists of an intelligent string fault detection, an electronic string fuse and the possibility to integrate a surge voltage protection (Type II) directly into the enclosure. This results in the fact that the inverter can easily be integrated into lightning protection concepts, as is required for public buildings in Germany and also in can be demanded by insurances companies. All in all the Sunny Tripower ensures maximum operation safety of the PV power plant. Furthermore, the new DC plug system SUNCLIX as fifth innovation significantly simplifies the inverter installation.

Sunny Boy 3000HF: Flexible, easy to use, efficient

With an efficiency of 96.3 percent and numerous technological innovations, the Sunny Boy 3000HF provides an optimum in this performance class with galvanic isolation. It offers nearly unlimited variation possibilities when designing the plant. A large number of modules is covered by only two strings, while the input voltage range reaches from 175 to 700 V. Installation work and costs are thus reduced. The Sunny Boy 3000HF is flexible and easy to configure in case module grounding is necessary: a simple plug module, the SMA 'Plug-in Grounding', is available for a quick and uncomplicated connection of a DC pole to ground.



With only 18 kilograms the new Sunny Boy HF has half the weight in comparison to similar models with low-frequency transformer. The SMA engineers made the configuration of the inverter even better: thanks to the 'Quick Module' communication unit the installer is able to configure the inverter without opening the enclosure. The easily accessible connection compartment containing both the DC plug system SUNCLIX and the plug connector on the AC side guarantees a quick and safe installation. Additionally, the integrated interface of the inverter enables the wireless system communication via *Bluetooth®*. The new devices are available in the performance classes of 2 and 2.5 kW and allow an individual design of the PV plant.

SUNNY CENTRAL 800CP: maximum power requiring minimum space

The Sunny Central 800CP is the result of a completely new design and offers maximum power as well as optimal efficiency on minimal space. It is the first PV inverter to combine 800 kVA nominal power with 98.7 percent efficiency. Due to its compact and weather-proof enclosure it is easy to transport, and can be installed almost anywhere. An additional feature that must be pointed out is the intelligent power management: in combination with the OptiCool ventilation concept, the device can deliver 880 kVA at 25 °C in continuous operation – ten percent more than the specified nominal power. The Sunny Central 800CP is the first outdoor PV inverter with over 500 kVA power and a compact enclosure. With its powerful grid management functions (including Low-Voltage Ride Through) the PV plant operator is perfectly prepared for today's utility requirements as well as those still to come.

A special highlight: the unique Optiprotect function monitors up to 1,600 strings for possible faults. The monitoring is done according to an intelligent adaptation process - it can be used without any time consuming calibration. The Sunny Central 800CP delivers 25 percent more performance in comparison with other devices on the market, all this with a reduction of the specific price of about 25 percent. Altogether this has significant impact on the system costs, while the power of the inverter was maximized. Here one can see that SMA is following the strategy to integrate highest power and latest technologies into the most compact inverter enclosures. Making external components obsolete and increasing the efficiency reduced the system costs even further, simplified the installation and maximized the energy yield.

New Multicluster Technology: Modular Island Systems with up to 300 kW

Additionally to the "grid-connected" innovations SMA announces a further new technology in the off-grid product range: Due to the new SMA development and the integrated Multicluster-Box 36 it is now possible for the first time to set up PV hybrid systems with an output power of up to 300 kW. SMA makes one big step towards the large scale supply with renewable energy for remote regions without connection to the public supply grid. For the first time large scale off-grid systems can be set up without expensive external experts, the installation, configuration and maintenance can be done directly on-site with minimal installation work conducted by trained personnel. SMA thus effectively reduces system and installation costs and makes an important contribution to the improvement of living quality in remote rural areas. The new SMA multicluster technology convinces with a robust and durable design as well as simplified service and maintenance. Depending on the situation the new concept allows the installation of large systems with up to 300 kW at once or with a step-by-step extension of the electricity supply according to the increasing demand.

Visit us at the Intersolar Europe 2010 from June 9 to June 11 (hall B4, booth 230).

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