INTERSOLAR 2018: Intersolar AWARD 2018: The finalists have been announced

From solar modules to inverters and substructures, the finalists in the Intersolar AWARD will be waiting in 2018 for efficient, digital and cost-saving solutions. They are thus predestined for the prestigious award in the industry, which awards trendsetting technologies and services to the solar industry. The winners will be announced on June 20, 2018 during Intersolar Europe, the world's leading exhibition for the solar industry, at the "The smarter E" Forum in Hall B2, Stand B2.570.

The presentation of the Intersolar AWARD has established itself as a festive end to the first day of the fair. For more than ten years, the award winners have reflected developments in modern energy supply and have motivated the industry to help shape the energy future with ever new, groundbreaking innovations. This benefits the industry - and every winner. Because the AWARD

Intersolar, ees, Power2Drive or EM-Power. In addition, exhibitor partner companies were also able to submit their innovation.

Efficient, sustainable, network-friendly - effective solutions are in the trend
In 2018, the focus will be on solutions that optimally exploit the properties of the respective products. For example, manufacturers of solar modules currently achieving more than 20 percent achieve higher and higher efficiencies and extend the life of the modules to more than 25 years. This is achieved with high-performance cells or back contact. Stable, thinner solar glasses also make PV modules lighter and easier to fabricate bifacial modules. The following applies to the glass surface: Increasingly lower reflection reduces glare even in unfavorable sunlight. And improved materials, such as a novel, cost-effective embedding material - a polyolefin elastomeric film - could replace previous standards, in this case the EVA film.

In the field of inverters for large systems, decentralization concepts are coming to the fore. As a result, new network management features such as black start capability, off-grid generation, real, reactive power, and frequency regulation improve network integration. Digitalisation also opens up new possibilities: Apps and cloud solutions simplify installation and assembly, intelligent assistance systems take care of routine tasks, and network structures such as WiFi Mesh support operations management. Moreover, in the area of substructures increasingly space-saving east / west systems are being installed, whose installation is becoming ever simpler.

The Finalists
- ABB (Italy): ABB introduces the PVS-175-TL String Inverter for large PV systems with 12 MPP trackers. It has a high efficiency and an enormous power density. Special features include 1500V capability, built-in data logging and communication standards, the installation app, multiple network integration features, and connectivity to the ABB cloud.

- Ecoprogetti Srl (Italy): The high-accuracy (AAA) LED solar simulator "Ecosun Bifacial" was developed for simultaneous testing of front and back I / V characteristics of bifacial PV modules. Different irradiance levels can be selected for the backside in order to be able to test flexibly and realistically.

- Gujarat Borosil Ltd. (India): The new 2 mm hardened solar glass with antireflection coating replaces the standard 3.2 mm glass. The glass is lighter and allows high transmission rates. An air-cushioned manufacturing chain prevents streaks, damaged areas or discoloration and ensures high production quality.

- Hanwha Q CELLS GmbH (Germany): The half-cell module "Q.PEAK DUO-G5" achieves a module efficiency of 19.9 percent with round-wire cell contacting and the use of six busbars (front contacts), which can be combined with cost-effective standard p-type Cells is reached. The new halving technology Q.ANTUM DUO stabilizes the cell and increases the shading tolerance.

- Huawei Technologies Co., Ltd. (China): The 60 kW inverter "Smart String Inverter (SUN2000-60KTL-M0)" satisfies passive ventilation thanks to its very good efficiency. With features such as online monitoring of all connected strings including characteristic measurement, Power Line Communications and a PID recovery mode, it deserves the product name "smart PV inverter".

- Interfloat Corporation (Liechtenstein): With the extremely low-reflection solar glass "GMB DEFLECT" for PV modules, thanks to a special geometry and antireflection coating, solar projects in areas sensitive to blinding, such as traffic routes (rail, motorway, intersections), flight approach lanes or realize dense residential development.

- Krinner Solar GmbH (Germany): The "CAS²" product optimizes the dimensionally accurate production of support systems for PV open-space systems. After the development of the CAD-based plant design, an individual and optimized design and planning is provided for each PV project and the installation robots are precisely controlled.

- LG Electronics Inc. (South Korea): The "LG NeON R" module series is fully back-contacted with 6-inch monocrystalline high performance cells in "Multi Ribbon Busbar Technology". A very high module efficiency of more than 21 percent with a 25-year module performance guarantee, high mechanical strength and reverse current capability as well as good temperature behavior make the series worthy of praise.

- Lumeta Solar (USA): The Lumeta Lynx glassless module for lightweight lightweight roofs is attached to roof surfaces with a thermoplastic adhesive. Special cable ducts and junction boxes complete the concept. By using monocrystalline PERC cells, a module efficiency of 18.3 percent can be achieved.

- RenewSys India Pvt. Ltd. (India): The new polyolefin elastomer encapsulation film "CONSERV E 360 Polyolefin Elastomer Encapsulant" is intended to replace the previously used EVA film in the production of solar modules. Remarkable are the high insulating capacity of the material, the good protection against potential-induced degradation (PID), the improved mechanical stability and the low permeability to moisture.

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