


Improving performance and long-term profitability of PV power plants

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New eBOS solution by Stäubli for less sensitivity to failures



The real degree of success for any PV power plant depends on interconnected systems and services that secure and optimize lifetime performance. PV systems are built to last for more than 25 years. Looking for quality components and services that secure long-term profitability will pay off.

Today, photovoltaic installations are extremely cost-driven. In a tough financial climate, it is not easy to find a balance between CAPEX and future OPEX. Cutting costs for infrastructure components during the planning and design phase can cause unexpected power losses and high maintenance costs over time. Focusing on proven quality products, based on solid and certified technology, in combination with comprehensive services at all stages of a project, should be considered.

The lifeline of a PV system

Connectors and cabling as parts of the eBOS (electrical Balance of System) application in the PV system may look like small details. However, even the smallest entry in the infrastructure investment sheet can have a significant impact on the safety and seamless performance of a solar plant.

Selecting quality components from the start pays off. Stäubli Renewable Energy, with its long-standing expertise in the photovoltaic industry, brings quality products and services to the market. The company recently enhanced its eBOS offering and introduced new connecting solutions. In co-operation with its business partner, Jurchen Technology, Stäubli developed cost saving innovations and launched a TÜV certified In-line Fuse harness and a Y-splitter harness as interconnection solutions at Intersolar Europe in Munich.

Connected for extended efficiency and reliability

This recent portfolio enhancement is backed by Stäubli know-how in developing advanced contact technology and designing quality products paired with Jurchen Technology's manufacturing expertise. The new products are specially designed to allow for efficient cable harness solutions with highest quality products.

Using a world-wide, unique and proven in-use vulcanization manufacturing process with specially developed cross-link material, the new Stäubli eBOS components offer the highest protection against water ingress, by granting an incomparable degree of impermeability.

This is a further important feature for best-in-class performance in harsh climatic conditions.

The new In-line Fuse harness and Y-splitter harness are product solutions based on Stäubli's Original MC4-Evo 2 connector, designed for DC 1500 V applications. With tried-and-tested MULTILAM contact technology and more than 25 years of experience in PV systems, this solution grants the most reliable and durable connections for long-lasting operation.

Connected for lower total cost of ownership (TCO)

Both new products in the Stäubli PV eBOS portfolio have been tested by an accredited body and hold a TÜV Rheinland certificate, which proves the high quality and longevity of the components.

The highest efficiency of the Stäubli all-in-one eBOS solution is granted due to low contact resistance technology, less leakage currents and perfect isolation given by innovative product design and manufacturing technology. The ready-to-use product design with connector assembly and customized solutions reduces potential failure risks and provides very short assembly time.

With less material used and smaller DC combiner boxes in the harness there are cost savings compared to conventional DC cabling systems providing a valuable contribution to lower the capital costs in the balance sheet. With fewer components in the harness yet still delivering the highest reliability, the installation becomes less sensitive and the maintenance costs can be reduced.

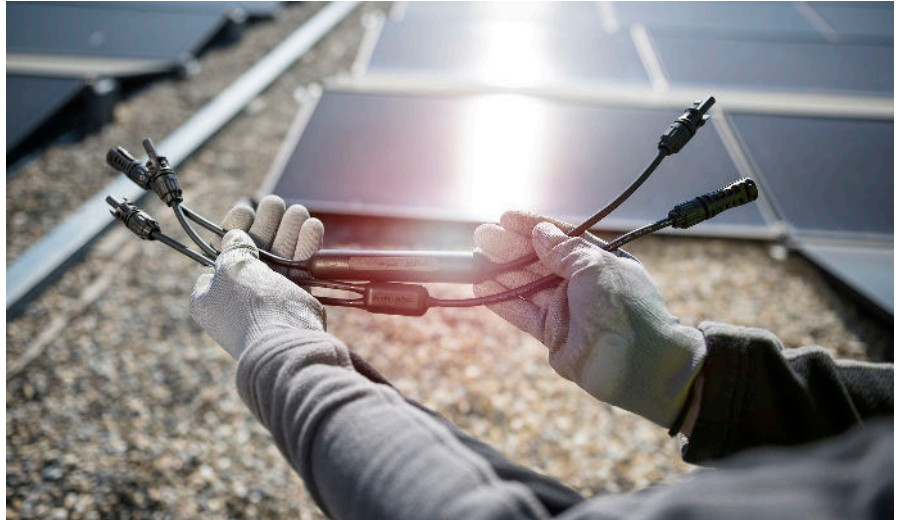
Connected for sustainable change

Stäubli Renewable Energy has evolved from product manufacturer to solution and service provider. The specialist complements its product solution offerings with competent services. Based on longstanding industry experience the Stäubli specialists share their expertise by providing additional services along all project phases. This initiative aims to support the efficiency and profitability of the customers' PV asset.

Thanks to Stäubli's experience, the right decisions can be made in individual project phases. This also allows for the creation of a solid project initiation for reliable and profitable operation of PV systems.

With a track record of around 540 GW connected PV capacity, which is more than 50% of the global capacity, the original MC4 of Stäubli is the most installed PV connector worldwide. The product portfolio of the Stäubli eBOS components are designed and manufactured in compliance with European Conformity caring for a sustainable supply chain to keep carbon footprint low. The comprehensive package of Stäubli Renewable Energy's experience offers a strong base for the sustainable success of its customers.

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Product portfolio enhancements for eBOS application



Eric Ast-Comoli, Global Head of Sales, Stäubli Renewable Energy

'As pioneer and market leader for connection solutions in the PV industry we are committed to making the PV industry safer. The global energy market is developing strongly and very fast in renewable energy, with photovoltaics ahead of all of them.'

'Therefore, we take a comprehensive approach to becoming more involved in the project business, extending our proposition to the solar market with tailored services. We believe that we have a responsibility to ensure a more secure growth of the solar market. By sharing our expertise, we can contribute to enhancing efficiency and profitability of our customers' PV projects.'



Andrea Viaro, Head of Sales EMEA, Stäubli Renewable Energy

'Backed by our longstanding experience we are committed not only to designing and manufacturing quality products for our customers, but also to supporting their handling and best-in-practice installation.'

'By ensuring that our products are used accurately, we can offer our customers added value solutions. Now, having enhanced our portfolio with powerful additional quality components in the eBOS applications, we can deliver a complete range of complementary services tailored to the customers' needs for each project phase and each stakeholder group.'

About Stäubli

Stäubli offers innovative mechatronics solutions in its four divisions: Electrical Connectors, Fluid Connectors, Robotics, and Textile. Founded in 1892, Stäubli is now an international corporation with headquarters in Pfäffikon, Switzerland, and with over 5,500 employees worldwide. Stäubli has a presence in 29 countries with production, sales, and service subsidiaries, including a network of agents in 50 countries.

Stäubli Electrical Connectors develops advanced connection solutions based on the reliable MULTILAM technology and provides connections for life in industries such as industrial automation applications, power transmission and distribution, railway, welding automation, test and measurement, medical devices and E-mobility. In the industry of Renewable Energy Stäubli is a pioneer and global market leader in photovoltaics with its MC4 connector portfolio that has set the industry benchmark. Active in this market for more than 25 years, Stäubli Renewable Energy creates the basis for sustainable change.

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