

AROS Solar Technology presents Sirio K800 HV-MT, the inverter for high/medium solar power plants

The new Aros inverter for high and medium power plants stands out for flexibility, efficiency, and reliability.

Cormano (Milan) 20 May 2014: AROS Solar Technology, Riello Elettronica Group's renowned brand and major player in the photovoltaic inverter market, is proud to present the new Sirio K800 HV-MT, the inverter designed to reduce TCO (Total Cost of Ownership) of medium and high solar power plants.

In particular, this inverter has been developed to meet the needs of a large number of international EPCs, for which the new Sirio K800 HV-MT is the answer to many criticalities. In brief:

Reduced structural and management costs: Sirio K800 HV-MT's configuration allows for considerable structural savings in the construction of large photovoltaic power plants; in fact, under particular irradiation conditions, one inverter is enough to manage 1MW fields. The wide input voltage range ensures the flexible management of several configurations with strings consisting of a large number of modules. The built-in string box, with 18 inputs monitored (single current measurements) and protected by fuses, allows for a reduced number of string boxes in the field, thereby eliminating this cost. The flexible configuration is enhanced by compatibility with photovoltaic modules that require earthing of one of the poles. AROS can provide these inverters with customised and optimised configuration according to the system's specific requirements.

Reduced maintenance costs: the top quality components and materials ensure the highest reliability. For example, given the critical nature of the electrolytic capacitors, we have used film capacitors with a lifespan of over 25 years. This helps eliminate scheduled maintenance costs to replace traditional capacitors, thereby ensuring continuous production. Moreover, the modular structure and industrialisation of sub-units arranged to ensure easy access to any component ensure quick and simple maintenance operations.

Efficient electronic system: The Maximum Power Point Tracking (MPPT) search algorithm implemented in the control system allows the full exploitation of the PV generator under any irradiation and temperature condition, thereby making the system work continuously with the maximum yield. All HV-MT central inverters provide maximum power at a room temperature up to 45 °C; upon exceeding this value, the inverter will simply adapt the output power, ensuring continuous operation. Thanks to speed control devices, the innovative ventilation system increases the yield of the equipment whilst allowing it to withstand even extreme environmental conditions.

Design efficiency: a series of measures has allowed for extremely high yield, which speeds up ROI (Return of Investment). These include a single stage power conversion system optimised to minimise losses and high efficiency components. To ensure higher safety standards and prevent fire in the event of failures inside the converter, Sirio K800 HV-MT inverters are provided with a

standard motorised disconnect switch on the DC side equipped with minimum voltage coil, which is activated in the event of short-circuit, serious internal anomaly, or external control.

Ready for the future: Sirio K800 HV-MT includes all the grid management and support functions, included, upon request, the supply of reactive power even during the night with the DC input disconnected.

“Our extensive experience in the industry has led to the development of Sirio K800 HV-MT with the aim of raising the bar in terms of reliability and efficiency. These solutions are mainly intended for those General Contractors who, at the moment, are finding the market conditions to develop large photovoltaic power plants abroad and have to guarantee a reliable service and speedy ROI to their investors” said **Tommaso Paolino** from the Aros Communications Department.

Information and contacts

Headquarters

AROS Solar Technology

Via Somalia, 20
20032 Cormano (MI)
Tel: +39 02 66327-1

Tommaso Paolino
+39 02 66327204
t.paolino@aros-solar.com
www.aros-solar.com

Press office - Media relations:

RGR Comunicazione e Marketing

Via del Tiglio, 7
56012 Calcinaia (PI)
Tel: +39 0587 294350

Leonardo Ristori
+39 329 2118296
rgr@rgr.it
www.rgr.it