

Belgium: Mobile Solar-Powered Festival - Fiesta Solar



The Challenge:

- Providing reliable, clean power for Belgium's Annual Fiesta Solar event.
 - With this installation 10 hours of electricity can be generated for 10 kilowatt-hour, this is a total of 100 kilowatt-hour.
- A mobile application that lives inside a truck. Multiple trucks were built and deployed by REN-Mobile for use at this event.

The Solution:

- A 100% Stand-alone Photovoltaic Installation using **four Morningstar's TriStar MPPT™ 60A Charge Controllers**, three 48V/8kVA inverters, a 48V / 1400Ah battery bank system and forty solar panels, each with a 3 kilowatt peak.
- The TriStar MPPT Controllers, with **Morningstar's patented TrakStar™ tracking algorithm**, provide maximum energy harvest for this remote installation site—under all operating conditions. [**The Industry's Highest Peak Power Efficiency Rating: 99%**]
- They are **environmentally optimized and offer extensive weather protections**. [Rated for an ambient operating temperature range of -40°C to +45°C.]
- Their **robust thermal design** (with passive heatsink convection cooling) dissipates heat quickly—reducing the operating temperature of the controller as well as protecting the controller's sensitive electronic components from dust, debris and sand particles—enabling **maximum reliability and a long operating life**.
- And their **low self-consumption** means more autonomous power for use at this Solar-Focused Fair.