



POWERING A CONVENT SCHOOL



Self-sufficient Power Supply **SUNNY ISLAND 5048**

Tanzania, East Africa: A diesel generator supplies energy for a convent school that has no access to the utility grid. Transporting diesel to the remote convent is time-consuming and expensive. Generators provide only two hours of electricity each day to power electrical equipment, which makes studying after dark difficult and hinders use of the school computer.

Since October 2012, a PV system has been supplying electricity for the school. Thirty PV modules, Sunny Mini Central 7000HV and the Sunny Island 5048 cover an annual energy demand up to 10,500 kWh. Excess electricity can be stored temporarily in batteries and a diesel generator backs up the system.

Now the pupils can use the computer and other electrical devices for longer stretches, and electric lighting allows them to study after sunset. Even without a connection to the utility grid, the schoolchildren have the foundation they need for a solid education.

System size

- 30 modules with 245 W
- 7.35 kWp total PV power
- 13 kVA diesel generator power

System information

- Location: Tanzania, East Africa
- Commissioned: October 2012

Annual yield

- Approximately 10,500 kWh

Inverters

- Sunny Island 5048
- Sunny Mini Central 7000HV

Self-sufficient Power Supply With Sunny Island