## **CASE STUDY** comparative analysis

## **OVERVIEW**

Highlighted Features: DC Safety Installer: Yomatec Installation Date: Jul. 2011 Location: Paris, France Average Irradiance: 1000 kWh/m²/year Installed Capacity: 30kWp Modules: Isofoton 235W Power Optimizers: 126 x A0B250 Inverters: 3 x SE10k Layout: 21 modules per string, 2 strings per inverter

The Hopital Privé Nord Parisien (HPNP) is a hospital just north of downtown Paris. It serves the greater Paris area and specializes in surgery and obstetrics. When HPNP first considered the installation of a PV system on the 650 square meter rooftop of its hemodialysis center, its management also evaluated the potential safety risks of such an installation.

Hospitals naturally underlie tightened safety regulations. The idea of placing high DC voltage on the building's roof raised serious concerns and was one of the main motives for the choice to install a SolarEdge system which includes an integrated safety mechanism. Whenever the inverter is cut off from the AC source, the SafeDC<sup>™</sup> disconnects the inverter from the solar modules, shuts off current and

## HPNP Hospital, Paris, France 30kW SolarEdge Site



reduces the strings' DC voltage to a safe level of 1 Volt per module. This mechanism makes a SolarEdge installation particularly safe for installers, maintenance personnel and firefighters.

The PV installation will reduce hospital's C02 footprint and serve as a long term financial investment. The project relies on three SolarEdge 10kW three-phase inverters and 126 monocrystalline Isofoton 235W modules with attached power optimizers. In this module-level system, maximum power point tracking allows for each module to provide its own maximum output independently of the others, therefore enabling the system to work at its maximum capacity and produce the greatest amount of energy possible for the hospital. Each module is further monitored individually, which guarantees HPNP simple operation and maintenance and easy troubleshooting, which are specifically valuable in installations of this scale.

"When we spoke to the management of Hopital Privé Nord Parisien we realized how concerned they were about safety and related regulations. We were happy to provide a solution that ensures comprehensive safety for the hospital and its patients. The SolarEdge system includes the inverter, power optimizers, a smart monitoring portal and the most advanced safety solution. It makes the system simple, safe, and cost-efficient, and will be a positive addition to the hospital long into the future."

Michel Ayache Director of Marketing Yomatec

