

## Studer Innotec inverters for 587 villages in Sri Lanka.

Studer Innotec was chosen to supply the 1'042 inverters of the biggest rural electrification project with 230Vac systems so far.

This project has been implemented by the Finnish company Naps Systems Oy in 2006 and 2007.

### The origin of the project

Due to the restructuration and privatization of the national utility of Sri Lanka, Ceylon Electricity Board (CEB), the electrification of some remote villages is not in the agenda for economical reasons.

Now it has been worked out that beyond 1 km from a house to the public grid, a solar system is cheaper than connecting the village to grid.

### Financing

The main obstacle is the up-front cost of solar, unaffordable without development aid funding. The financing was provided by the States of Finland and of Sri Lanka.

### Description of the project

This is the largest rural electrification project with 230 Vac systems so far : in total 1'042 systems with inverters and inverters-chargers, split in 587 villages to supply water and electricity to schools and health centres in Sri Lanka. It is a mixed project : Sri Lanka Government + NGOs. The systems have been designed, supplied and then commissioned by Naps Systems Oy.

The project consists of the following types of solar systems:

- . schools: 700Wp (picture below)
- . staff quarters: 400Wp
- . health centres: 700Wp (opposite picture)

And pumping systems of 400 and 800Wp



### Supply of the AC appliances

For the supply of the 1'042 sine wave inverters, Naps Systems chose Studer Innotec for the outstanding performances and very high reliability of its products. Here are the products that were supplied and commissioned since 2006:

- . 450 inverters AJ 600-24
- . 592 inverters-chargers XPC 2200-24

This project meets Studer Innotec's intention to position itself as a major actor of the village electrification, on the inverter side. The serie Xtender, launched in July 2007, has been developed for an even more adapted answer to this kind of application, either in hybrid systems or in minigrids.

A project of same size as the one in Sri Lanka is now being implemented with Xtender inverters-chargers in Malaysia.

