

Harnessing The Power Of The Sun



The spiralling cost of electricity bills have compelled consumers to seek alternative energy solutions to attain their electricity requirements. J Lanka Technologies, recognising the potential in the alternative energy industry, has come forth with solar energy solutions, paving the way for a new source of energy to satisfy the requirements of people.

by Hansani Bandara

Installation of solar panel electricity systems thus far has been the most suitable solution to overcome the increasing cost of electricity. Solar panel electricity systems (Photovoltaics or PV) absorb the sun's energy using photovoltaic cells and harvest electricity through an inverter connected to the system.

Understanding the need of the hour, J Lanka Technologies, has ventured into the service provision of solar energy solutions where the company has pioneered the introduction of Solar Edge System—with an increased performance capacity compared with the conventional solar electricity systems—to the local market.

When selecting a solar electricity system, factors such as the technology, features of the system, performance warranty and after sale service should be thoroughly studied to arrive at a decision. The capacity of the system should be determined according to the electricity usage of the particular entity. Ideally for an entity which utilises over 250 units of electricity per month, installation of a solar electricity system would be advantageous.

“With the Solar Edge System, a person can either zero his electricity bill or decide whether or not to save a certain percentage of the bill depending on his consumption,” opines Dr Mayura Jayasoma, CEO – J Lanka Technologies.

Solar Edge System comes with three components; the solar panel, the power optimiser and the inverter whereas the conventional system only features the panel and the inverter. The power optimiser increases the power generation capacity of the system which is unique to Solar Edge. The optimiser enables the generation of up to 25 percent more electricity from each panel.

The conventional system has a string inverter type setup where the solar panels are connected in a form of series. Thus it feeds a collective harvest to the solar inverter which is then distributed throughout the electrical system of the house. Solar Edge System, on the other hand has a distributed harvesting system where power is harvested via every single panel and fed to the inverter individually. This enables the system to perform at its peak.

“In case if a panel is shadowed or defective, only that panel is isolated while the rest of the system operates at its optimum. Also it is flexible when it comes to upgrading where only the number of panels should be increased when upgrading,” explains Dr Jayasoma. The system also comes with a built-in fire protection unit and monitoring order which can be accessed through the internet, enabling the systems to be monitored constantly.

“All solar electricity units installed by us are regularly monitored. Our system operates in a mechanism which automatically notifies us if a system is malfunctioning, depending on the priority of the issue. We have a separate unit dedicated for this task,” explains Dr Jayasoma emphasising on the efficiency of the system where majority of the malfunctions could be repaired through remote servicing rather than physically visiting the site.

All components of the Solar Edge System are offered with a standard warranty period where a 25 year warranty is offered for the power optimiser while the inverter comes with a 12 year warranty.

“More importantly all these systems are made to suite the climatic conditions of our country and our solutions can be tailor made according to the lifestyle consumption of a customer,” says Dr Jayasoma.

With experience of over 140 successful installations, the aim of JLanka Technologies is to be the trendsetter of the solar energy industry. It is to ensure that every Sri Lankan home is powered with solar electricity with the right solar energy solution.