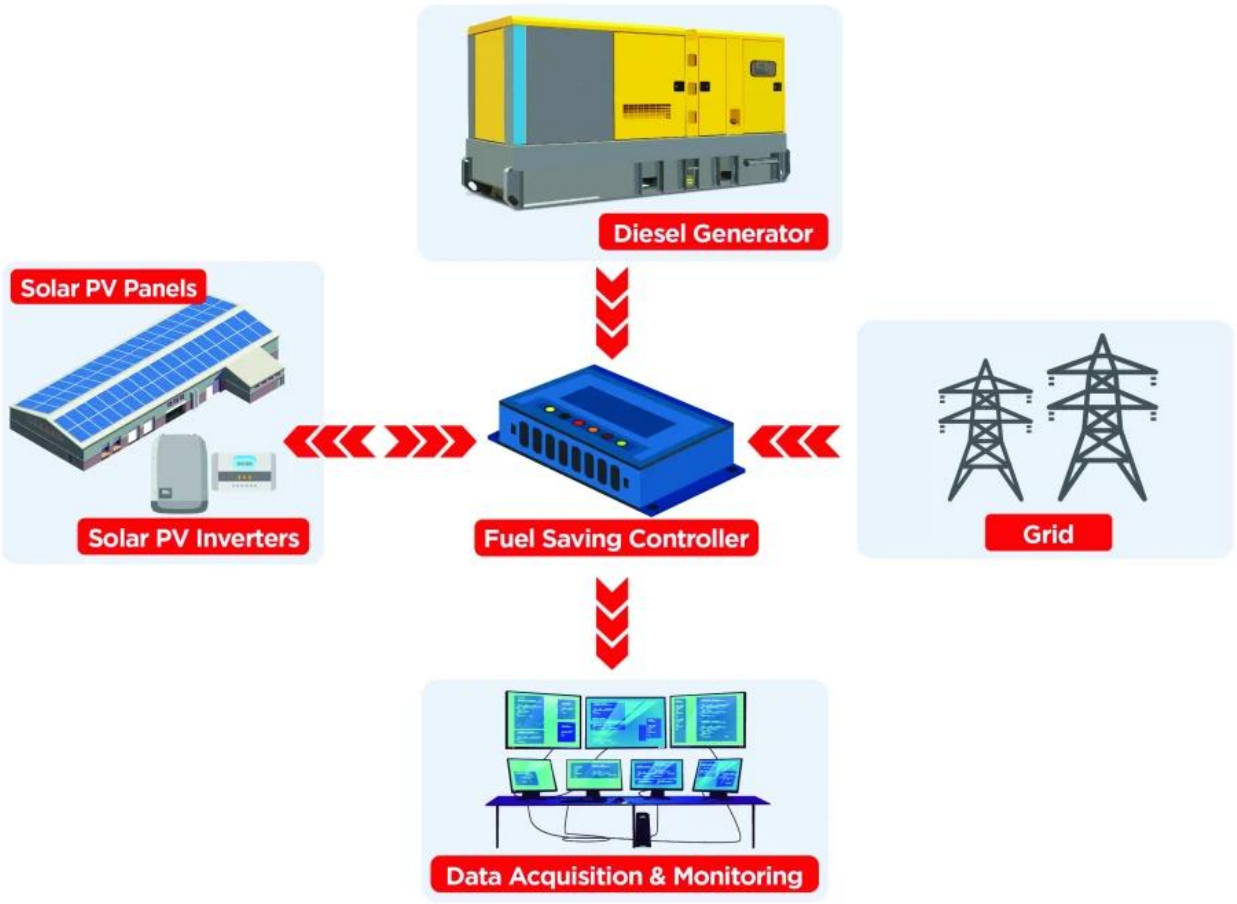
DI-Solar from DIMO, Sri Lanka’s First Battery-less Solution

Posted on

DI-SOLAR

Industrial Solution



The brief work process of the system

DIMO has introduced DI-Solar, a revolutionary solution, enabling the power generated through the existing solar PV systems to be utilized during the prevailing daytime power interruptions, thereby preventing power wastage.

This is Sri Lanka’s first and only cutting-edge solution in the market that allows the power generated by solar systems to be utilized without any mode of battery storage. It is ideal for the industries facing various challenges due to the power shortage in the country, as it facilitates uninterrupted business operations and reduces the spending on fuel for generators by 50 percent to 70 percent. In addition to the heavy focus on industrial usage, DI-Solar also comes with a consumer solution component, which will soon be introduced to the market, further accelerating

nation’s green journey. Indus- tries in Sri Lanka face many challenges to seamlessly continue their business operations during the regular power cuts without incurring production losses and downtime. Although many business enterprises have pre-installed rooftop solar PV systems, they cannot use the power generated through the solar PV systems during power outages during the daytime, as the grid is unavailable. Thus, they are compelled to entirely depend on generators to continue operations at a time when fuel incurs a high cost. The continuous offering of innovative solutions to address the country’s power sector issues is a testament to DIMO’s vast expertise in the power and energy sector. DI-Solar offers a high-tech controller from a leading manufacturer in Europe that would be

installed on new or existing solar PV systems. Whenever there is a daytime power interruption, it enables the premises to operate as an off-grid system and utilize the power generated through the solar PV system to cater to the internal requirement, which otherwise would have been wasted. When power interruptions occur during the daytime, the generators will start producing electricity to serve the electricity demand on the premises. In the next instance, the pro- posed controller comes into operation by using the parameters in the electricity generated by the generator to trigger solar PV inverters to be switched on. The solar PV inverters will then commence generating electricity and become the primary energy source to cater to the load while reducing the electricity generation by generators, result- ing in a reduction in fuel consumption. Moreover, this solution can be further improved to use even during the night-time power interruptions by integrating a battery. DI-Solar can be customized according to any existing solar PV system. The company also offers solar PV systems with this solution for the industrialists who do not possess pre-installed solar PV systems to power their plants.

Ranjith Pandithage, the Chairman/MD, DIMO said, “This project is yet another timely offering by DIMO and we continue to fuel the dreams and aspirations of the communities we serve in, providing the nation the means to switch to renew- able energy solutions, which in the current context is extremely important.”

If installed at a facility with an approximate solar PV system capacity of 650kW and experiences an average three to four- hour daytime power interruption, during which generators are used to cater to the demand, the DI- Solar system has a capability to drastically reduce the fuel consumption, as it only requires fuel to cater for the minimum load of the generator (around 30 percent of the generator capacity). The rest of the energy requirement of the generators (the balance 70 percent) will be attained by utilizing solar energy generated through the solar PV panels. Accordingly, the business enter- prise will also reduce its expenditure on fuel and enjoy a swift payback period of one-two year.

DI-Solar also allows industries to use renewable energy without totally depending on the national grid as a proactive measure in facing any future challenges in the local power sector while also allowing them to contribute more to the national GDP output through uninterrupted operations and reducing the foreign spend on fuel imports.