

Panasonic provides a stand-alone photovoltaic power package to off-grid areas in Myanmar

September 23 2016



Street lights brightening up the night.



Scene at a religious service in the meeting area



The Power Supply Station and the villagers

Credit: Panasonic

Panasonic Corporation provided the Power Supply Station; a stand-alone photovoltaic power package, to the village of Yin Ma Chaung, a Magway Region of the Republic of the Union of Myanmar. The Power Supply Station is installed as part of a CSR effort by the Sustainable Alternative Livelihood Development Project, supported by the Mae Fah Luang Foundation under Royal Patronage (MFL Foundation) of the Kingdom of Thailand. This project was rolled out in partnership with Mitsui & Co., Ltd as one of their CSR activities, and funded by donations to support the mission of the MFL Foundation's activities.

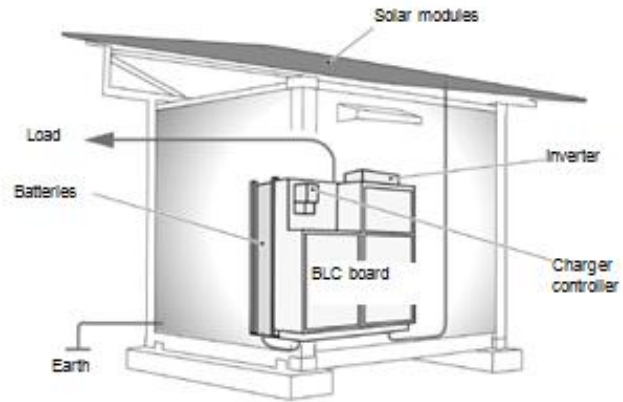
Panasonic's power supply station consists of solar modules and storage batteries, which enables energy to be created, stored and managed efficiently. The whole system is able to supply electricity to the entire village, relieving approximately 140 households in the non-electrified mountainous village by powering up electrical appliances and lights, which are essential and important in daily lives.

The presence of lightings in the village makes it possible for villagers to move around during the night, as prior to that; they were unable to do so since the area is inhabited by poisonous snakes. In addition, all the street lights have time-switch LED bulbs that could also make use of limited electricity, efficiently.

In Myanmar, its off-grid areas are said to be at the highest level among the ASEAN countries, at approximately 68% across the nation. In its countryside, the number reaches to an estimate of 84% households being unconnected to electricity. To step up on its efforts, Panasonic also installed a refrigerator in the village's meeting area to store anti-venom drugs. With a well-powered point, the meeting area has thus serves as a center for welfare, entertainment and other purposes.



Power Supply Station (exterior image)



Power Supply Station (outline of system structure)

The whole initiative aimed to provide additional electricity to surrounding villages as well; contributing to the entire Yenan Chuang Township.

Panasonic will continue to develop localized solutions in its bid to provide electricity to off-grid regions and improves the standard of living amongst communities, around the world.

The Power Supply Station is equipped with twelve Panasonic HIT solar modules and can output approximately 3 kW of electricity. It is also equipped with 24 storage batteries (approximately 17 kWh), enabling it to supply stored power.



Portable knockdown type
[Frame for the solar modules]



Easy to install, no need for
special tools
[Solar modules]

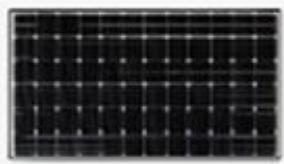


Reliable electrical connection
[Solar module connector]

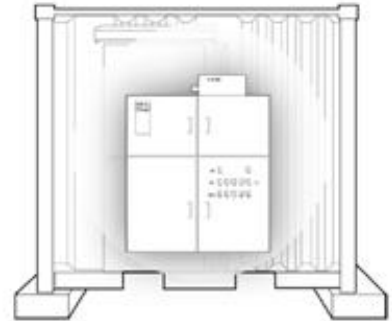
Features of the Power Supply Station stand-alone photovoltaic power package

(1) Stable quality and performance achieved by production at the factory

The Power Supply Station was developed as a mass produced product to deliver stable quality overseas. The unit for this project was manufactured and its quality was controlled by our Thai subsidiary, Panasonic Eco Solutions Steel (Thailand) Co., Ltd., before delivery to Myanmar.

HIT[®] 3 solar modules

Deep cycle lead-acid batteries



Power supply main unit

(2) Simple and quick assembly for portability and expansion

The station is designed to eliminate the need for on-site professional construction work, allowing an electrical contractor to easily and quickly install it.

(3) Utilization of proven Panasonic technologies

The station uses Panasonic HIT 3 solar modules to provide power efficiently, even in restricted spaces. The company's newly developed power supply main unit acts as the energy management system to monitor the remaining electricity level of the lead-acid storage batteries and controls supply and demand, reducing deterioration of the batteries. This reduces the life-cycle cost and maintenance man-hours for the storage batteries.

Provided by Panasonic Corporation

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