

Varisun Ground-Mounted Solar Pumping System at Oya Organic Farm



Qualify for federal incentives such as REAP and state incentives as the SWEEP program



Contact

Sustainable Technologies

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MBE, SBE, Bay Area Green Business

varisunTM



Solar Pumping Systems

by Sustainable Technologies

Power any 3-phase
pump with solar

Solar Solutions

Solar solutions featuring VariSun™ controls from Sustainable Technologies are a good investment for Agriculture operations looking to save money and go green. Whether you're involved with crops, dairy, or livestock, Sustainable Technologies can help you harness the sun for clean, economical solutions.

The VariSun™ Direct Solar pumping Systems lets you use direct solar energy to power any three-phase pump.

It's perfect for running pumps in remote locations that aren't practical for grid-tied power, while also eliminating the need for costly and polluting diesel generators.

The VariSun Direct Solar Pumping System will run the existing or new 3 Phase VAC standard pumps modulating the pump speed according to the amount of energy available at any given time. The VariSun system provides about 9 Hours of usable pumping in the summer months.

The VariSun 3 Phase Solar Pumping Systems do not need to be connected to the utility grid. You will not need to pay for a new electrical service or pay for a generator and the fuel that it uses every year. The VariSun system will operate on its own for years to come.

The Modular VariSun Pod skid is a portable scalable solution for pumps up to 10 HP. The 10 panel pods are foldable, self-standing and the install in minutes. One 3.45 KW Pod will run a 3 HP pump.



VariSun Portable system sizes:

- 1 -10 panel pod- 3.4 KW- 3 HP pump
- 2- 10 panel pod- 6.8 KW- 5 HP pump
- 3- 10 panel pod- 10.3 KW-7.5 HP pump
- 4- 10 panel pod- 13.8 KW- 10 HP pump



Ground Mount VariSun Solar Pumping System

For larger pumps, it is more cost effective to install a ground mount Solar Array sized for the pump HP and the dynamic total head of the pumping system. For example, a 25 HP pump will have a 28 to 35 KW solar array. The VariSun Control panel and Combiner box will be mounted on the ground mount Array. Sustainable Technologies provides the complete design and engineering drawing package and installation service to complete the system.

Monitoring and Remote Control Sensors and Irrigation Controls

An EZEio cellular controller will provide remote control and communication with the pump controller. Additionally, analog sensors will be able to be view, logged and graph on the system website. Included in the package will be a pressure sensor transmitter that will be able to control the pump speed to a set pressure. This would allow the operator to open and close valves and the pump controller will maintain the pressure by increasing or decreasing the speed of the pump. The pressure sensor signal will also be sent to the cellular controller for remote viewing and logging. Flow meter pulse sensors, moisture sensors, thermometer can all be integrated into the pumping systems. Calendar and scheduling is also available on the system website.