

## Project Name: **Small Scale Farm Project- South Africa**



**Company:** Gensmart Electrical  
**Location:** South Africa  
**Project Date:** July 15, 2023  
**Main Contact:** Ian Rosen – Installer/Integrator  
**Application:** Farming – Battery Back Up  
**Customer Type:** Agricultural  
**Phocos Product:** **Any-Grid PSW-H Hybrid Inverter**  
**Quantity:** 3 Units

## Project Description/ Key Details

A farm business owner in South Africa was dependent on an unreliable electric utility, greatly impacting the success and profitability of his business. Electricity was required to not only run the day-to-day operation for the equipment on the farm, but was also required to conduct a functioning office environment to do normal business tasks to support customers, organize logistics, facilitate strategy, etc. This unstable utility grid would often not provide power for 10 hours/day, so productivity at this farm suffered continuously. This is an impossible way to run a successful business and execute growth goals.

## Solution/ Results

**Gensmart Electrical**, a trusted solar installer in the region, was chosen to design a solution to help this business owner focus on running their business and not waste time on overcoming daily electricity interruptions. Continuous power was required for this entrepreneur. A 3-phase, uninterruptible power supply was installed, comprised of **three Any-Grid Hybrid Inverters** (8kW, 230/48 model, one inverter per phase). To store the energy, the Hybrid Inverters were connected to **six Phocos Any-Cell ESS (LiFePO4 batteries)**, totaling 30kWh of energy storage capacity. This farmer was thrilled to have an energy solution backed by a 10-year warranty.

Rather than let the utility impact the farming business negatively, now this owner controls the power the utility provides when it is working. The priority on the Any-Grid units is set to operate with the battery bank to store energy to use when the utility power goes down. So, the utility is providing all incoming power, but the business owner has created energy independence with this new installation investment, to manage the incoming power in a more strategic way.

After installation, the end-user is no longer subject to power outages when the utility grid fails, resulting in higher productivity and less product waste. There are even plans to add photovoltaic panels in the future, to lessen dependency on the utility, and lower monthly electric bills, further ensuring the best profitability for this farmer.

*"The Phocos Any-Grid Ecosystem works together seamlessly, and the backup is incredible. This makes our company proud and confident to be part of the Phocos extended team."*

— Ian Rosen  
 Director of Gensmart Electrical

**10 hrs/day**  
 avoided utility  
 downtime  
 reducing lost  
 inventory & adding  
 efficiency for day-  
 to-day business

### Featured Products:



**Any-Cell**  
 ESS-L 5kWh/48V



**Any-Grid**  
 PSW-H-8kW-230/48V