

# FranklinWH Energy Management System

Ensures Continuous Operations and Significantly Lowers Electricity Bills for a Texas Farm

## Situation

A farm owner who lives in a rural Texas county encounters at least 6-10 power outages each year. To ensure the farm operates stably, and to also lower its huge electricity bills, the farm owner decided to add an energy management system that includes solar and energy storage.

- Household Appliances: 4 well pumps, a 5-ton AC and 4 window units, 2 greenhouses, an EV charger, 4 freezers, a refrigerator, and other high-power equipment.
- Based on actual usage, peak power consumption is 13.95kW, and average monthly electricity consumption is up to 5,305kWh.

## Requirements

- No reliance on the grid, energy freedom without compromising quality.
- The batteries can provide energy for all electrical equipment, even in extreme weather.



## Solution

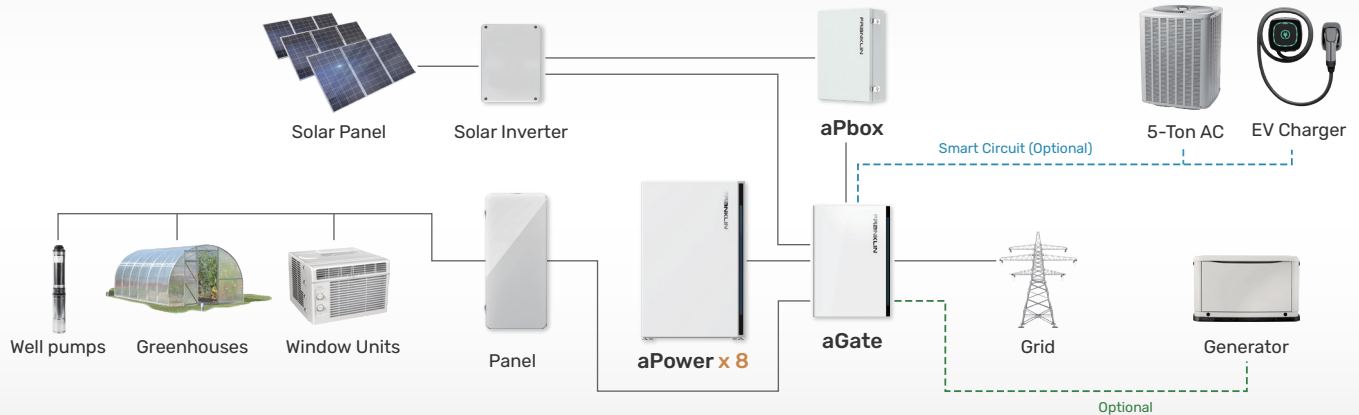
Based on the owner's electricity consumption and electrical characteristics, the installer recommended a stackable FranklinWH solution which uses the aGate intelligent controller and 8 aPower batteries to form an energy storage system, providing 40kW continuous power and 108.8kWh capacity, enough to support the owner's power demands during a grid outage.

In rainy weather, the batteries with an IP67 protection design (enhanced waterproofing) can work together with a generator to ensure the quality of electricity used by the owner.

The system also has a built-in Smart Circuits Module. The owner can define individual run schedules for the 3 Smart Circuits through the FranklinWH App, so as to effectively manage high-power electrical equipment.



## Distribution Layout



## Benefits

- Off-grid energy independence.
- Uninterrupted on-grid/off-grid transition.
- Energy assured in extreme weather.
- Manage and monitor the energy at hand.

## Testimonial

“ The batteries are aesthetically pleasing and the blue lights indicating the level of charge are eye-catching. These batteries are AC coupled and have the ability to easily start and run my relatively large 5 ton central AC condensing unit with no problem. With the large number of batteries my system contains, they can power my entire electrical system for long periods of time.

One thing that really stood out was the sales and technical help that FranklinWH brings to the table. They were very friendly and helpful throughout the process.

## Installation Summary

**Client:** Texas farm owner

**Location:** Texas

**Installer:** Advanced Solar and Electric LLC.

**System Allocation:** 1 aGate + 8 aPowers

**System Size:** 108.8 kWh

Their app allows you to see what amount of power your house is using at any given time and what amount of that power is being supplied by the batteries, the sun (PVs), the grid, or my generator.

The system is sleek, relatively compact, and completely sound-free. It is my intention to add additional batteries over time to increase the capacity of the system. ”

The Texas farm owner

