



## Wind Powered Drones at Utah Valley University

Orem, Utah, 84058 | Ryse Energy | 5 kW E-5 + 160 W AIR Breeze | Installed by Ryse Energy



Photo Credit: Ryse Energy

## **Key Findings**

- Generates ~ 6.52 kW combined capacity
- Provides continuous power supply through battery storage for field missions

## **Impact**

- Demonstrates power of wind+solar hybrid systems
- Showcases innovative energy independent solutions

More than 77,000 Utah properties have wind resources suitable for distributed wind with a combined technical potential of 732 MW, per NREL

Utah Valley University (UVU)
partnered with Ryse Energy to
implement a mobile hybrid energy
system to power its drone operations.
UVU needed a mobile power solution
able to support both campus-based activities and
remote field operations. The innovative solution
combines an E-5 wind turbine (5 kW), an AIR Breeze
wind turbine (160 W), four 340 W solar panels,
battery storage, and an inverter mounted on a
portable trailer.

This mobile system enables UVU to charge drones and power field equipment entirely through independent energy, whether stationed on campus or deployed to remote locations, while involving students in utilizing and demonstrating energy independence principles.

