



## The Vroom Forecaster

A simple meter to measure solar availability in real-time without loads (utility grid or battery)

### Team

Combined we have over 30+ years experience in solar and 15-35+ years experience in our individual fields. Both founders have owned and operated several companies and have a combined 20+ years experience in solar.

### Keywords

Solar, Solar Availability, Solar Capacity, Solar Efficiency, CUF, Power Reserve Estimation, AgTech

### Partners

Core Source Technologies, Sol Donum, Rice Alliance Accelerator, Brite Innovations, Capital Factory

### Problem

How to accurately determine the power reserve estimation for a utility scale PV power plant.

### Solution

The Vroom Forecaster meter reads the wattage output of solar panels, without load draw or connection to a grid or battery. Currently, the meter allows very accurate power to be determined and delivered straight to the loads on a small scale at 350 volts in the Vroom 3000 Control Center for small scale

Top: Current weather stations for solar arrays  
Bottom: Vroom Forecaster will fit in combiner boxes, monitoring multiple strings and keeping installation the same

solar, but by the Set! Demo Day, we will scale up to 1000+ volts for utility scale.

### Accomplishments & Team

- Functioning 350 volt version of the Vroom Forecaster in the Vroom 3000 Control Center
- Raised \$920,000 in investments
- Vroom 3000 Control Center
  - Capital Factory
  - Phase I of the AFWERX SBIR grant
  - Pepperdine's Most Fundable Companies Top 100
  - Rice Alliance Clean Energy accelerator program
  - Vroom 3000 product launch Q1 2025

### Plan

- Research and develop components and galvanic isolation techniques suited for 1.5kVDC solar array interface and operation of the Vroom Forecaster while maintaining a cost point in line with existing irradiation meter arrays.
- Update existing Vroom Forecaster circuitry and software to accept the higher voltage circuit components.
- Update the Vroom Forecaster to accept up to 10 simultaneous high voltage panel array inputs and modify the control software to scan and compute the capacity of the multiple high voltage inputs.
- Secure letters of commitment from solar array combiner box manufacturers. We think this physical interface is the best placement for the higher voltage Vroom Forecaster and to introduce it to utility scale solar arrays.

