

Grid-Tied Commercial System

U.S. Forest Service Solar Installation in Tucson, AZ



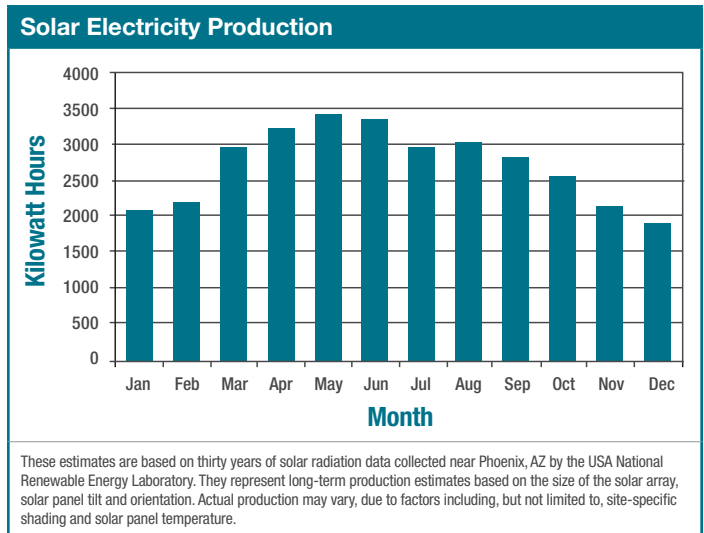
This 21kW elevated solar racking structure was installed at the U.S. Forest Service office in Tucson, AZ to provide a low-cost alternative to utility power. With a reputation for offering competitive pricing, innovative engineering and unrivaled system performance, Alpha Energy designed, installed, commissioned and tested the system in only 30 days.

The U.S. Forest Service installation consists of one array of 120 photovoltaic panels. The output of the modules is combined, sent to three 6,000kW inverters and converted from DC to AC energy. The AC electricity from the inverter is then transferred to the main building power supply. The array is supported by a specially-engineered Alpha elevated solar racking structure with extra space to accommodate 12 extended height bucket and forestry trucks.

The system will generate more than 32,000kWh per year, enough to power about 3 homes. The resulting CO₂ offset of 36,765lbs is equivalent to preventing the annual emissions of more than 3 cars.

All Alpha systems are designed for superior weather resistance, professional engineer stamped and can withstand adverse weather.

System Specifications	
System Power:	21kW
PV Array:	(120) 175W Panels
Solar Inverters:	(3) 6000kW AC
Covered Parking Spaces:	12
Warranty:	10 year inverter warranty, 25 year module limited warranty



Progression Photos

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Open parking space dedicated to solar power



Alpha designed the elevated solar racking structure



Structure meets wind load requirements of the area



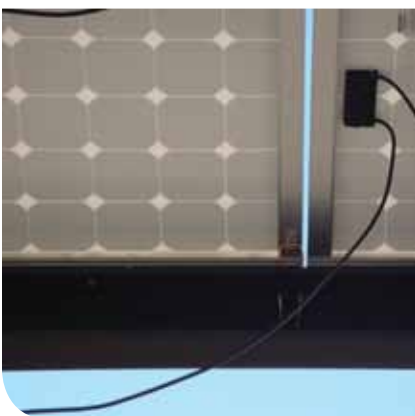
Structure is a very secure method of panel mounting



Used 120 solar panels



Required three 600kW inverters



Visible from the street



Will generate more than 32,000kWh per year



Created 12 covered parking spaces