

# Grid-Tied Solar System

Johnson Controls Prison Complex



**Alpha Energy is a renewable energy systems integrator and full-service engineering and project development company. Alpha Energy worked with US Prefab to engineer a series of turnkey parking shade structures supporting the bulk of an Alpha supplied solar power system.**

This parking structure allowed the necessary mounting flexibility to generate the desired powering requirement, while providing protection from the elements and increased social awareness due to the systems visibility from the street level.

The 12kW grid-tied solar power system includes 72, 170W PV modules and three 4kW solar inverters. The installed system is part of an 18-stall parking structure with an overall dimension of 37'8" x 123'5".

The system will generate 20,351kWh per year, offsetting more than 28,491lbs of CO<sub>2</sub> which is equivalent to offsetting the emissions from nearly 1,500 gallons of gasoline.

System Specifications	
System Power:	12kW
PV Array:	(72) 170W modules
Solar Inverter:	(3) 4kW

