



## Off-grid DC System

DC off-grid power systems are most often used to power DC appliances in cabins, farm, telecommunications station and warehouse when utility power is not accessible. DC power is less expensive than AC solar power because an inverter is not required to convert the electricity produced by solar modules and stored in batteries from DC to AC.

Application: **Warehouse in Xining (Western China)**

Load: **10 kWh per day**

PV nominal power: **0.98kWp**

Wind turbine: **1kW**

Battery storage: **40kWh**

The amount of autonomous day: **3**

Annual produced energy: **4200kWh**

In this case, the warehouse in Xining has no accessible grid which makes PV stand-alone system most suitable. 0.98 kW PV modules and 1 kW wind turbines are installed, producing 4200 kWh electrical energy annually. It can work 3 days without sunshine.

