

Solar System



1. Photovoltaic (PV) Panels
The house uses 51 BP panels, generating 175 watts each. The array can generate 8,925 watts of electricity on a sunny day. (This diagram shows 8 panels.)



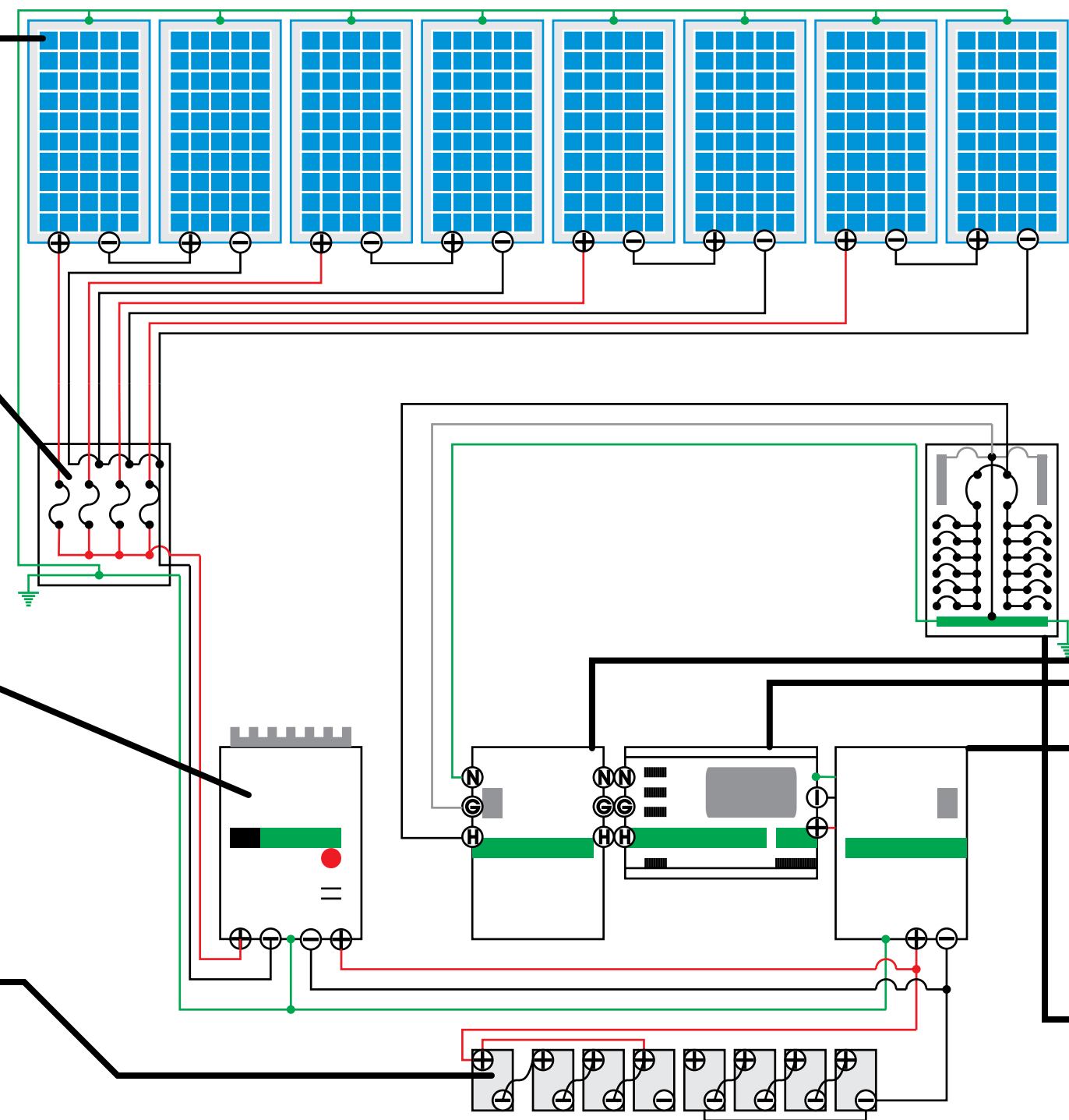
2. PV Combiner
Three Out Back PV combiners combine 50 wires from the panels into six bigger wires.



3. Charge Controller
Three Out Back charge controllers monitor electricity entering the house to prevent over-charging or under-charging the batteries.



4. Batteries
32 East Penn Deka batteries store excess electricity for use when there is little sunlight.



5. DC Disconnect
For safety, the DC disconnect separates direct current (DC), originally from the PV panels, from the rest of the system.



6. Inverter
The inverter converts the DC, to alternating current (AC), that can be used in the house with 98% efficiency.



7. AC Disconnect
The AC Disconnect is where AC electricity from the inverter enters the house. The house can be connected to the power grid at this point.



8. Breaker Box
The breaker box automatically shuts off power to short or overloaded circuits in the house.