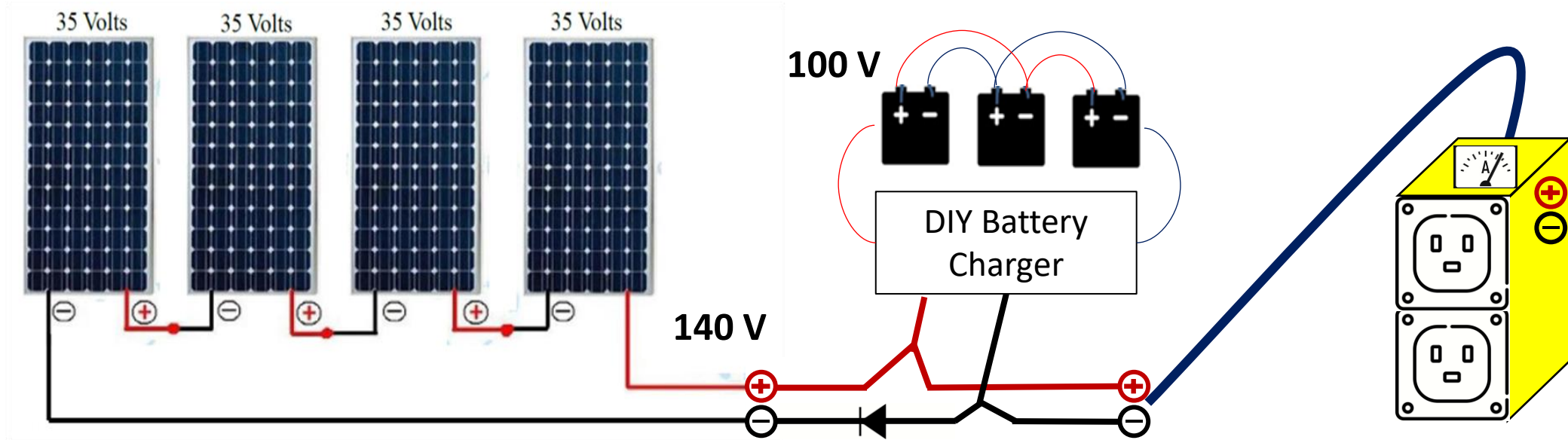


DIY Grid Sketch: w/Battery



Solar Panels

Vmax 140 DC

Vmax of the string (summing each panel Vmax in series) should be ~20% above Load voltage*

*Solar output voltage (for most panels) decreases 0.4% per degree centigrade temperature above 25 degrees C. "HiT" technology panels don't have this limitation.

Batteries

~ 100V DC

For reserve power, battery voltage needs be lower than Vmax solar voltage. Battery should be ~ 100V to provide power when no solar.

DC Box: Jack Jr.

100-105V DC output (Japan)
100-120V DC output (US)

This power is 99% direct current, which is interrupted to prevent sparks in switches.