

Upgrading my PL system for more solar capacity

So I'm planning on adding some more solar panel capacity to my existing PL regulator system. What are my options for upgrading?

Option 1

Buy a larger regulator. PL60 (60A solar charge) is the largest of the PL range. This is probably the least cost option.

Option 2

Buy an additional PL regulator and a PLA synchronisation device. The PLA synchronises up to three PL regulators to the same stage of the charging cycle (boost, equalisation, absorption and float). Without this synchronisation, a multi controller system can be trapped in the boost mode indefinitely if there is insufficient charge current from any one controller to reach the boost maximum voltage setting (BMAX). The PLA has additional features such as programmable alarm outputs and computer interfacing. Various combinations of PL20, PL40 and PL60s may be used.

Option 3

Obtain a suitably rated mechanical or solid state relay to switch in the additional solar panels via the PL's load or G terminals, programmed for the diversion control function. For larger voltage and current systems, it may be difficult to source the required relay. This is best suited for adding smaller solar capacities in the order of 20A, depending on the relay. For relay suppliers, try:

Jaycar Electronics	http://www.jaycar.com.au/
Farnell	http://au.farnell.com/
RS Components	http://australia.rs-online.com/web/
Wes Components	http://www.wescomponents.com/

If you want to measure the current going through the relay, then you will need a SH200 current shunt and PLS2 external shunt adaptor, as well as a WYS (PL20/40) or WZS cable (PL60).

For programming information, see FAQ fact sheets:

PL_Example_Extending.Solar.Capacity.using.a.Solid.State.Relay.Info.from.RPC
PL_extending._adding.extra._solar.capacity.via.mechanical.relay_V1.4