

2.7.5 AC-COUPLED CONFIGURATION

SH5000 inverters may be fitted to an existing grid-connected system in an AC-Coupled configuration—the Redback system can charge its battery using excess power from the grid-connected inverter.

In an AC-coupled installation the Redback inverter requires DC power to automatically restart flat batteries after a grid outage. At least one PV string should be connected to the inverter otherwise a competent person will be needed on site, to conduct manual restarts.

A competent person may be the homeowner, if trained.

The SM3000 measures energy flow at the grid-connected inverter and at the grid connection, enabling the calculation of house loads and the regulation of SH5000 output to ensure compliance with the Grid Export Limit (specified using RedbackINSTALL).

Connecting the SM3000

1. Connect the SM3000 as shown below.
2. To ensure correct readings, ensure CTs are clipped onto cables as shown below.
3. Attach CT1 to the grid connection, between switchboard and the Main Meter.
4. Attach CT2 and CT3 to the grid-connected inverter output: CT2 and CT3 must oppose each other on this cable (arrows are pointing away from each other).

