

## EXTERNAL PV INVERTER CURTAILMENT

Solar curtailment is necessary when Feed-in-Tariff (FIT) prices are negative, meaning consumers must pay their energy retailers to export excess solar. If customers are using a wholesale tariff energy retailer (e.g. Amber Electric), then negative export prices may occur most days (especially in SA and VIC as of 2025). In other states like NSW and QLD, whilst negative prices are still common, they often only dip negative for a short period and with a value of a few cents/kWh. The expectation is that the cost of negative FITs will increase over time in these states. Empower's ElektroBank 14 is an all-in-one solar + battery home management system. Any solar panels directly connected to the ElektroBank 14 are automatically curtailed when EmpowerIQ optimisation chooses to do so, with the aim of minimising the customers' bills.

For sites with separate solar inverters there is currently no way to curtail the solar being exported by this other solar inverter. Empower have designed a system where we can connect a physical cable between the Elektrobank14 and the external inverter in order to turn off the external inverter when it is advantageous to the customer. This would often only be once the battery is full and the excess solar generation will be re-directed to the grid, but there are many different examples/use cases. To maximise the lifespan of the solar inverter, Empower minimises the number of on/off switches it sends.

This is a simple and low-cost way to save the customer more money on their energy bills. To minimise the associated installer call out costs of this curtailment solution, Empower recommend organising for completion during the initial system install or when other changes/upgrades are being done.

### Installation Method:

1. Order 1x **DRM0\_Curtailment Cable** from Empower:.. [sales@empowerenergy.com.au](mailto:sales@empowerenergy.com.au).
2. When on site, power down the unit using the process described in the [installation manual](#).
3. Remove the wiring panel and connect the ~30cm **DRM0\_Curtailment Cable** as shown in Figure 1 by the yellow circles.

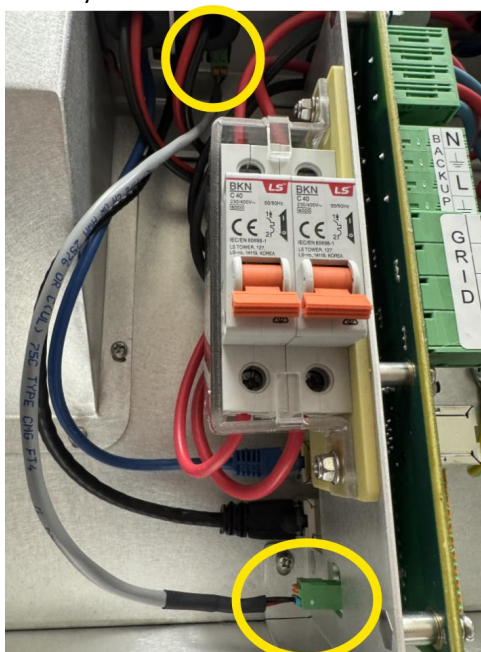


Figure 1: DRM0 cable connected

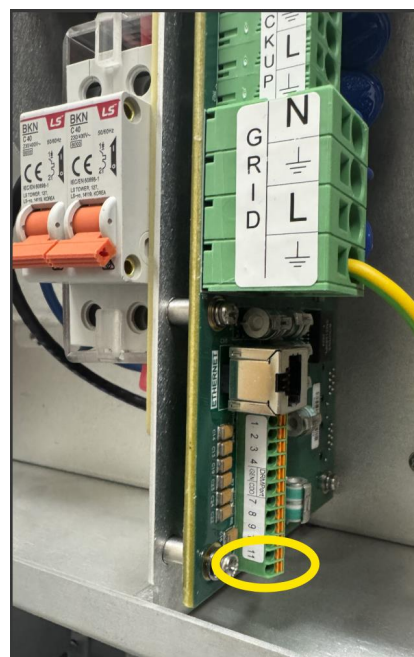


Figure 2: Pins 11 & 12

4. Connect a twisted pair cable (normally CAT6) that is correctly rated for the installation to **pins 11 and 12 (not labelled)** as shown in Figure 2 by the yellow circle.
5. Connect the other end of the cable to the DRM0 port of the external inverter. This should be well labelled or explained in the manual. This may require crimping an RJ-45 connector for some models of inverters.
6. Call Empower 02 8745 8835 for a final quick commissioning test (we will automate this in the future).
7. **Ensure customer turns on EmpowerIQ optimisation and enters their ToU bill into the app otherwise the PV curtailment functionality will not be enabled!**