

Power Optimiser De-energising Guide for Australia

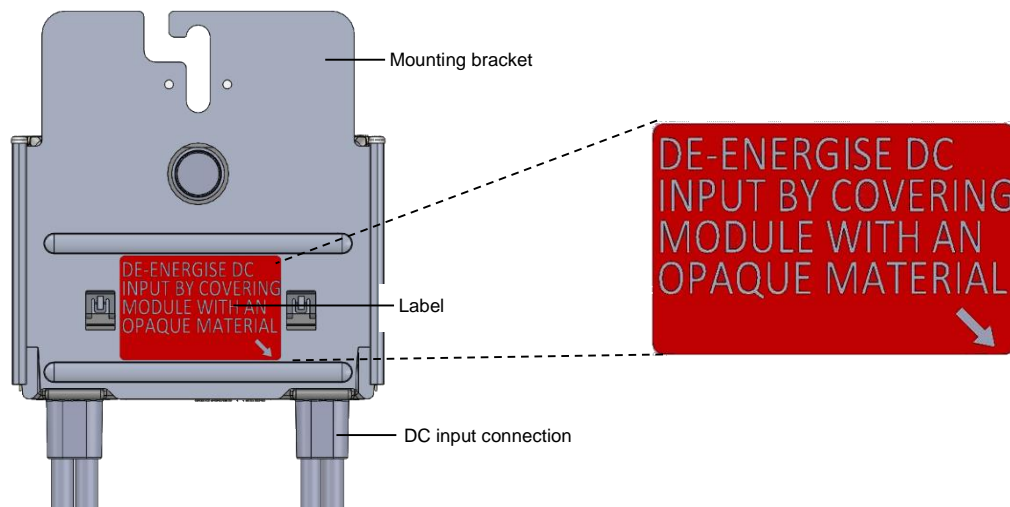
Clause 2.15 in the AS/NZS5033:2014 standard states that if the power optimiser input power is higher than 350W, an isolator between PV modules and the power optimiser is required to enable safe module disconnection. That is, as long as each optimizer's input power is limited to 350W or less at the time of connection or disconnection, an isolator is not required.

Limiting the input power can be achieved by covering the associated module(s) with an opaque material before breaking the DC input connections, to de-energise the circuits.

Labeling the system

For SolarEdge systems where AS/NZS5033:2014, clause 2.15 applies, when installing power optimisers with a rated input power higher than 350Wp, a label shall be placed on each power optimiser, as described below.

Attach the label on the mounting bracket of the power optimiser, with the arrow pointing to the DC input connection. If the optimizer bracket is facing the roof, place the label elsewhere on the optimiser where it will be visible.



Labels may be purchased from SolarEdge. For a package of 60 labels, order the following part number: SE-60LABEL-OPT.



NOTE

It is also permitted to use locally prepared labels.

De-energising the circuit

When using power optimizers with combined input power >350Wp, to comply with AS/NZS 5033:2.1.5 (c), perform the following steps prior to any work carried out on the system's PV Arrays - including handling modules and optimiser connections.

Turn the inverter ON/OFF switch to OFF.

Turn the inverter Safety Switch to OFF.

Use a suitable DC clamp meter to test the current flow within the input circuits of the power optimiser to confirm the circuit has been de-energised:

- If current flow is not detected, there is no power in the circuits and the DC inputs are safe to disconnect.
- If current flow is detected (or if a DC clamp meter is unavailable), cover the associated module(s) with an opaque material before breaking the DC input connections, to de-energise the circuits.