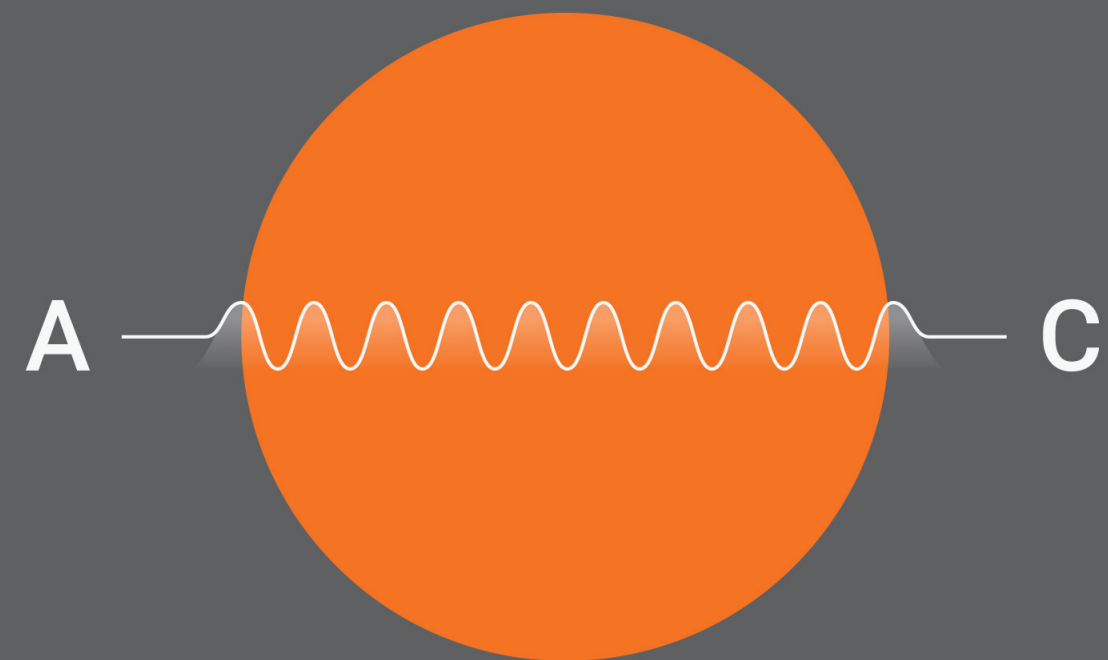


AS5033:
**The hard way or
the easy way?**



AS/NZS 5033:2021 IQ microinverter advantages

Effective Friday, 19 November 2021, AS/NZS5033:2021 lifts the bar for DC string system safety in many areas.

The Standard is 143 pages, however the enhanced safety of all-AC Enphase microinverters has been recognised in the exemption from almost all the new requirements. See table to the right for full details.

Revised microinverter requirements:

Item	AS/NZS 5033:2014	AS/NZS 5033:2021
Microinverter power/voltage limit	350-Watt limit.	No power limit. 120VDC (ELV) input limit.
Disconnection	Switch disconnectors not required for module connection to microinverter.	DC connectors can be used as load break disconnectors under 120VDC.
Mounting position & cable length	Cable length from the PV module to the d.c. conditioning unit is no longer than 1.5 m. No extension cables.	Maximum 1.5m <u>distance</u> from solar panel to microinverter.
PV array earthing	4mm ²	Earth cable in the AC cable minimum 2.5mm ² can be used to earth a PV Array with microinverters.
System labelling	Basic warning signs for all systems.	New PV warning signs for systems that identify and differentiate AC microinverter systems from DC.
Earth fault alarms	Not applicable for ELV systems (below 120 Vdc). Refer to IEC 62109-2.	Not applicable for ELV systems (below 120 Vdc) that are separated (galvanically isolated) Inverter. Refer to IEC 62109-2.

System labelling
with Enphase



System labelling
with DC systems



AS/NZS 5033:2021

PV system map for an AC system (microinverter-based).

Unlike DC systems, the new Standard only mandates several essential inputs for an AC PV system map. In addition, you can use the Array View in the Enphase App to generate the system map for your customers.

Additional information required for DC systems only.

- The path of DC cabling
- The location of DC disconnection points, indicated by “DP”
- The location of additional load break disconnect(s)
- PV array size
- DC voltage
- Warnings where DC disconnection type(s) can only be operated by qualified personnel



AC Microinverter PV (Solar) System Information

Location: 123 Main St., Anywhere, ACT, 2650



Site Information	
Installation Date	1/12/2021
System Type	AC Microinverter

Shutdown Procedure
Turn off the Main Switch (Inverter Supply) located at the switchboard or the Inverter AC Disconnect