

ALPHA ESS TECHNICAL NOTICE

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Relevant to Models	Smile G3

SMILE G3 N_N_REVERSE_LOST_FAILURE



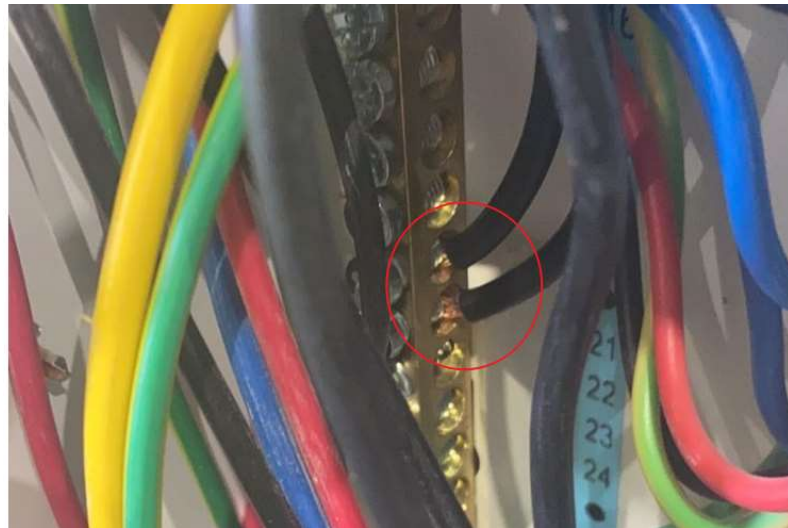
As required by the Australia Standards and to maintain the neutral continuity, the neutral cable on the Backup port and Grid Port must be connected to the same neutral bar. Our new Smile G3 looks to detect this and, if it's not detected during the installation system, The G3 will report a fault.

When commissioning the G3, if the system detects that the Backup/UPS Neutral is not connected to the Normal Supply Neutral, you will see the system status as normal on the monitoring portal while on the actual inverter, the "SYS" light will be red. The LED indicators will display a pattern for this error (first, third and fifth bar is on). *This fault will not prevent the system from operating normally but will keep displaying on the inverter if you don't fix it.*

HOW TO SOLVE THIS PROBLEM

If you **do** have a backup circuit:

1. Test the UPS function: Turn off the AC circuit breaker, the system will go to ups mode, and if the backup terminals are wired correct and plugged into the backup socket firmly you should expect the critical loads (lights, fridge, etc.) to remain "on".
2. Check if the neutral conductors for grid AC and backup are connected to the same common neutral bar, note that the Neutral wires do not need to be physically connected to the same Neutral bar, as long as the Neutral Bars are linked.
3. Turn the AC back on and if fault is still there reboot the whole system.



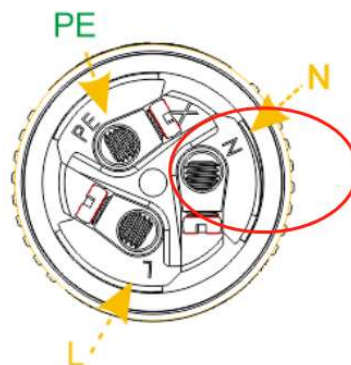
Neutral cables connected to the neutral bar

If you **don't** have a backup circuit:

Unfortunately the G3 is not able to detect whether there is a backup circuit wired. This, quite frankly, is annoying, because it means that the G3 will flag an issue with the lack of a Neutral on the backup circuit. Our Engineers are working on a solution for this issue in the medium term.

For now, you can simply clear this fault by linking the UPS circuit to Neutral, just one time.

1. Make a neutral cable (ideally with 10-14mm external diameter and 4-6mm² cross section, but it can, in practice, be any wire – it will not be left in place).
2. Insert the Neutral conductor to the neutral terminal in the UPS Plug and tighten the screw and assemble the locking cap.
3. Plug the connector into the backup socket
4. Connect the Other end of the Neutral wire to the neutral bar.
5. Once the fault is cleared, you can disconnect the UPS plug and the UPS Neutral wire – The fault warning will have cleared and will not come back.



REFERENCE

