

Sungrow SH10T Hybrid – Calculating max backup load

Disclaimer

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The Sungrow SH10T is a 3-Phase hybrid inverter with a built-in automatic backup.

The SH10T can handle 63A per phase connected to the backup port when the inverter is connected to grid.

Off-Grid mode:

However, the maximum backup when the unit in Off-Grid mode resorts to 10 kW total (15 kW surge capacity for 10 seconds).

Backup data (off-grid mode)	
Rated voltage	3 / N / PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V (± 2 %)
Rated frequency	50 Hz / 60 Hz (± 0.2 %)
THDV(@Linear load)	< 2 %
Backup switch time	< 10 ms
Rated output power	5000 W / 5000 VA 10000 W / 10000 VA
Peak output power *****	10000 W / 10000 VA , 10 s 15000 W / 15000 VA , 10 s

Phase calculations:

In other words, the max phase current in Off-Grid mode is:

$10,000 \text{ VA} / 3 = 3300 \text{ VA}$ per phase (5 kW for 10 seconds)

In other words, backup loads should not exceed 14.3A per phase

If the issue persists after following above procedures, please take photos testing on site and contact Sungrow Service Department on 1800 786 476 or email to service@sungrowpower.com.au, Monday- Friday 9am - 5pm (AEDT).