

Residential Energy Storage System



# PowCube 4.8







5 kW hybrid inverter 4.8 kWh / 9.6 kWh / 14.4 kWh battery



Use more of the solar

**1580 kWh** solar energy stored by the battery and used later in evening peak-time



Save more

**\$854** saved by using solar power and battery energy instead of purchasing from the electricity retailer



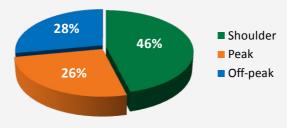
Make a better world

**3100** t CO2 reduced to save the environment

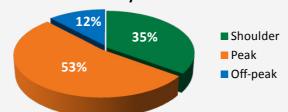
\* Annual data based on a case study of a house with a family of four on a fixed electricity rate, with one battery pack. The savings and benefits may vary depending on factors such as power consumption, production and tariff structure.

### **Benefits of PowCube 4.8**

#### **Energy consumption**



#### **Electricity bill**



#### Premium charged during peak period

Energy usage during peak periods contributes the most to electricity bills.

PowCube 4.8 – An ideal choice to **minimise** your peak time electricity bill

# - PV Load 6.0 5.0 4.0 3.0 2.0 0.0 0 5 10 15 20 Time (h)

#### Mismatch of PV generation and load consumption

The consumption period does not match the PV output well either with evening peak, high day and evening peak or other energy usage habits in a house.

PowCube 4.8 – An ideal choice to **maximise** your solar self-consumption

The Sungrow residential energy storage system, the PowCube 4.8, is an ideal choice to facilitate the self-consumption of PV power by storing excess energy and using it later in the evening.

Trial Installation 1

Electricity usage type: Evening peak

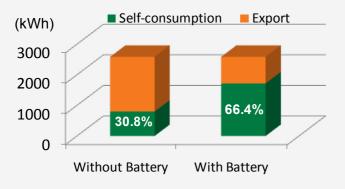
Installed Dec 2016 One battery pack

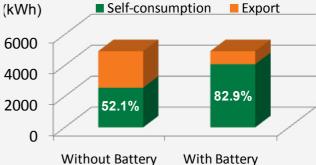
Trial Installation 2

Electricity usage type: High day and evening usage Installed Jan 2017 Two battery packs

#### Self-consumption increase 35.6%

## Self-consumption increase 30.8%





# **System Solution**

#### Standard energy storage system

The PowCube 4.8 entitles the home owner to manage house energy usage, saving electricity bills by shifting the PV power to when it's needed, such as in peak tariff periods.

With the EPS box connected, the system is capable of supplying power for essential loads in the event of a grid interruption or blackout.



# Retrofit solar system

The PowCube 4.8 is compatible with any single-phase solar grid-connected inverters. An existing solar system can be retrofitted to be a solar energy storage system with the addition of the PowCube 4.8.



With the Sungrow meter installed, the system could be configured to a zero-export or partial-export system to meet utility grid restriction. For the zero-export case, the inverter output will continuously adjust to match the load consumption power in order to restrict the export power.

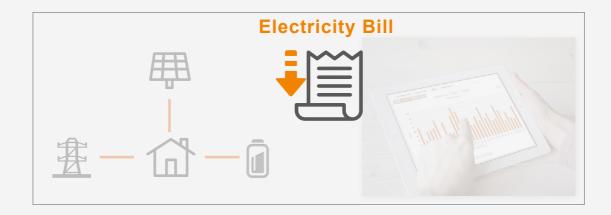
## Features of PowCube 4.8



# **Smart System Management to Save More on Bills**

- · More solar energy is used rather than selling back with low profit thanks to the optimised EMS
- Customisable battery usage scenarios and smart load control

Reduce your bills and maximise the return on your investment by charging the battery during the day and using it when you need it (with the highest rate of return being if you discharge most or all of the battery during peak tariff periods).





## High safety and prolonged battery lifetime

- An optimised BMS cooperating seamlessly with the EMS
- Multiple levels of protection in the battery such as fuses in the cells and system
- Smart hibernation technology to maintain the battery's state of health







Multi-level protection

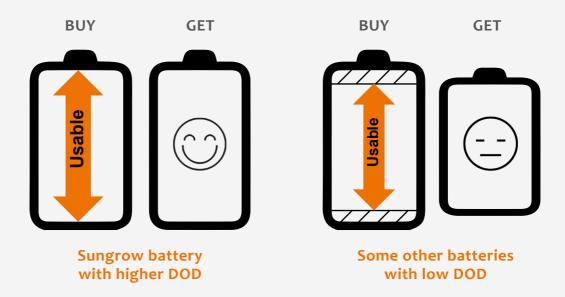
Smart hibernation 24/7 protection



# DOD > 95%, more usable energy

- High reliability and safety with Samsung cells and a smart Sungrow control system
- Over 95% depth of discharge to maximise the usable capacity

PowCube offers you at least nearly all of the available energy.

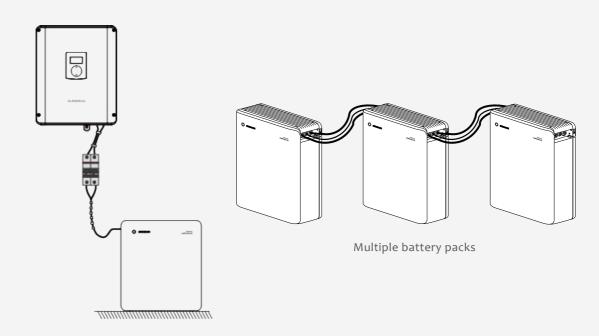




# Simple installation and space saving

- Modular design of the inverter and the battery
- Suitable for both free-standing and wall-mountable installation
- Simple setup for multiple battery packs

Make the installation easier and more flexible than ever.





# Easy one-click online system firmware update

- Onsite one-click system firmware update
- Remote system firmware update service

No more onerous work with complicated firmware updates for new features.









**Remote Update** 



# Local comprehensive support

Service contractors across Australia and expanding

Sungrow provides solar inverters and batteries at affordable prices with comprehensive support. We are green and effective.





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