Sungrow Technical Note

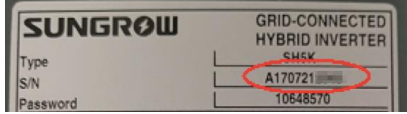## SH5K+ New Firmware Release (V044)

Dear Customer,

To meet the growing demand for the residential energy storage market and provide better storage system solutions, Sungrow released its next generation residential battery storage system, which is a new Sungrow-Samsung Li-ion battery SBP4K8. As a system solution supplier, Sungrow also introduces PowCube 4.8 included SH5K+ hybrid inverters and SBP4K8 batteries. To offer more options of batteries for the energy storage system, the latest SH5K+ firmware V044 is also compatible with the BYD low voltage battery. Furthermore, the latest firmware version (V044) must be used in conjunction with the WiFi V24 module (refer to Table 3) to support remote firmware updates if the system is connected to Sungrow web portal.

The latest firmware of the SH5K+ (V044) was released September 2017. The main changes of the new firmware are as below:

1) Compatible with Li-ion Sungrow battery SBP4K8; and
2) Compatible with Li-ion BYD battery U3A1-50P-A; and
3) With the remote firmware update function (must be used in conjunction with the WiFi V24 module).

Sungrow Australia Group Pty. Ltd.
Add: 1703/99 Mount St, North Sydney NSW 2060
Tel: 1800 SUNGROW (786 476)
Sales: info@sungrowpower.com.au
Service: service@sungrowpower.com.au
Web: www.sungrowpower.com.au

To distinguish the SH5K+ (V044) from the previous SH5K+ firmware versions, please refer to Table 1.

Table 1 How to distinguish SH5K+ V044 via serial number and battery types

Serial number (SN)	Brand new inverters have the new firmware if the SN starts from **A170816xxxx** and after. For SNs beginning with A170620xxxx and A170721xxxx, please contact Sungrow to check the firmware version, or check on the LCD screen as showed below. a sticker of a box a data of an inverter A serial number (SN) showing on a sticker of a box and a data sticker of an inverter.
Battery types showing on an LCD screen	**SH5K+ V044 has added Sungrow and BYD "battery types"**

Sungrow Australia Group Pty. Ltd.
Add: 1703/99 Mount St, North Sydney NSW 2060
Tel: 1800 SUNGROW (786 476)
Sales: info@sungrowpower.com.au
Service: service@sungrowpower.com.au
Web: www.sungrowpower.com.au

Different application scenarios and functions of SH5K+ Non-EPS and SH5K+ are listed in Table 2.

Table 2 Hybrid inverters application scenarios

	SH5K+ Non-EPS	SH5K+ (firmware before V044)	SH5K+ V044
Appearance	- Gold casing - Two buttons 	- Silver casing - Four buttons 	
Energy Meter			
Emergency Power Supply	✗	✓	
Retrofitting the existing PV system	✗	✓	
Forced charge from the grid	✗	✓	
Load import power recording?	✗	✓	
Battery Usage Time	One time period on weekends	Two time periods each on weekdays and weekends	
Remote firmware update	✗	✗	✓ (must be used in conjunction with the WiFi V24 *)

* Refer to Table 3

Sungrow Australia Group Pty. Ltd.
Add: 1703/99 Mount St, North Sydney NSW 2060
Tel: 1800 SUNGROW (786 476)
Sales: info@sungrowpower.com.au
Service: service@sungrowpower.com.au
Web: www.sungrowpower.com.au

To distinguish the WiFi-V24 module from the WiFi-V22 module, please refer to Table 3.

Table 3 How to distinguish the WiFi-V24 module via packaging and WiFi icon

	SolarInfo WiFi-V22	SolarInfo WiFi-V24
Packaging	- Labelled as Solarinfo WiFi-V22	- Labelled as Solarinfo WiFi-V24
WiFi icon	- orange WiFi icon	- blue WiFi icon with LED indicators
Hybrid Inverter (SH5K+ and SH5K+ Non-EPS)	✓	✓ **(support remote firmware update function)**

A list of compatible batteries with Sungrow hybrid inverters (SH5K+ Non-EPS and SH5K+) is in Table 4.

Table 4 List of compatible batteries with Sungrow hybrid inverter

	SH5K+ Non-EPS	SH5K+ (firmware before V044)	SH5K+ V044
Sungrow SBP4K8	✗	✗	✓
LG RESU (G1/G2)	✓	✓	✓
GCL	✓	✓	✓
Pylon (US2000A/US2000B)	✓ (US2000A only)	✓	✓
BYD (U3A1-50P-A V1.2)	✗	✗	✓
Lead acid batteries	✓	✓	✓

For details, please refer to the manual of SH5K+ V044 or contact Sungrow service team on 1800 SUNGROW (786 476) or email us via service@sungrowpower.com.au if you have any enquiries.

Thank you for your continued support.

Sungrow Australia Group

18/09/2017