BYD Battery-Box HV Compatible Inverter List

Battery-Box H 5.1/6.4/7.7/9.0/10.2/11.5

Battery-Box H 5.1/6.4/7.7/9.0/10.2/11.5(AU)

Battery-Box H 5.0/7.5/10.0

Version 4.2

Contents

1 Compatible Information Table

Inverter Brand	Inverter Type	1 Phase on Grid	3 Phase on Grid	Inverter firmware version	Inverter UI version	B-Plus H 1.28 / B-Plus H 1.28A	B-Plus H 2.5	BCU	Battery-Box firmware version
SMA	SBS 2.5	√		V2.4.23R	/	4~8	/	1	V3.004R
SMA	SBS 3.7 / 5.0 / 6.0	√		1.00.20R	/	4~8	2~4	1	V3.012R
SMA	SBS 3.8-US / 5.0-US / 6.0-US	√		1.00.20R	/	4~8	2~4	1	V3.012R
KOSTAL	PIKO 6.0/8.0/10 BA		√	FW-B2.30	UI-B6.44	4~9	/	1	V3.012R
KOSTAL	PLENTICORE plus		√	1.12	01.02.01539	4~9	/	1	V3.012R
Fronius	Symo Hybrid 3.0-3-S / 4.0-3-S / 5.0-3-S		√	1.11.1-3	/	5~9	/	1	V3.012R
GOODWE	GW5KET / GW5KL-ET / GW8K-ET / GW10K-ET / GW10KL-ET		√	V7	/	4~9	/	1	V3.012R
Ingeteam	INGECON SUN STORAGE 3TL / 6TL	√		ABH1002_Y	ABH1003_P	4~5	/	1	V3.012R

2 Configuration List of BYD Battery-Box HV with Different Inverters

2.1 BYD Battery-Box HV Configuration with SMA Sunny Boy Storage

Inverter Firmware version: minimum required firmware version for SBS 2.5 is V2.4.23R.

Battery-Box firmware version: minimum required firmware version for BCU is V3.004R.

1 Phase on Grid		
Inverter Type	B-Plus H 1.28 / B-Plus H 1.28A[1]	BCU
SBS 2.5	4~8	1

Inverter Firmware version: minimum required firmware version for SBS 3.7 / 5.0 / 6.0 and SBS 3.8-US / 5.0-US / 6.0-US is 1.00.20R.

Battery-Box firmware version: minimum required firmware version for BCU is V3.012R.

1 Phase on Grid			
Inverter Type	B-Plus H 1.28 / B-Plus H 1.28A	B-Plus H 2.5	BCU
SBS 3.7 / 5.0 / 6.0	4~8	2~4	1
SBS 3.8-US / 5.0-US / 6.0-US	4~8	2~4	1

[1] B-Plus H 1.28A is applicable for Australian market.

2.2 BYD Battery-Box HV Configuration with KOSTAL PIKO & PLENTICORE Plus

Inverter Firmware version: minimum required firmware version for PIKO is FW-B2.30.

Inverter UI version: minimum required version is UI-B6.44.

Battery-Box firmware version: minimum required firmware version for BCU is V3.012R.

3 Phase on Grid		
Inverter Type	B-Plus H 1.28 / B-Plus H 1.28A	BCU
PIKO 6.0/8.0/10 BA	4~9	1

Inverter Firmware version: minimum required firmware version for PLENTICORE plus is 1.12.

Inverter UI version: minimum required version is 01.02.01539.

Battery-Box firmware version: minimum required firmware version for BCU is V3.012R.

3 Phase on Grid		
Inverter Type	B-Plus H 1.28 / B-Plus H 1.28A	BCU
PLENTICORE plus	4~9	1

2.3 BYD Battery-Box HV Configuration with Fronius Symo Hybrid

Inverter Firmware version: minimum required firmware version for Symo Hybrid 3.0-3-S / 4.0-3-S / 5.0-3-S is 1.11.1-3.

Battery-Box firmware version: minimum required firmware version for BCU is V3.012R.

3 Phase on Grid		
Inverter Type	B-Plus H 1.28 / B-Plus H 1.28A	BCU
Symo Hybrid 3.0-3-S / 4.0-3-S / 5.0-3-S	5~9	1

2.4 BYD Battery-Box HV Configuration with GOODWE ET

Inverter Firmware version: minimum required firmware version for GW5KET / GW5KL-ET / GW8K-ET / GW10K-ET / GW10KL-ET is V7.

Battery-Box firmware version: minimum required firmware version for BCU is V3.012R.

3 Phase on Grid		
Inverter Type	B-Plus H 1.28 / B-Plus H 1.28A	BCU
GW5KET / GW5KL-ET / GW8K-ET / GW10K-ET / GW10KL-ET	4~9	1

2.5 BYD Battery-Box HV Configuration with Ingeteam INGECON

Inverter Firmware version: minimum required firmware version for INGECON SUN STORAGE 3TL / 6TL is ABH1002_Y.

Inverter UI version: minimum required version is ABH1003_P.

Battery-Box firmware version: minimum required firmware version for BCU is V3.012R.

1 Phase on Grid		
Inverter Type	B-Plus H 1.28 / B-Plus H 1.28A	BCU
INGECON SUN STORAGE 3TL / 6TL	4~5	1

3 Common Issues Displayed on Inverters and Solutions

Note：The battery reports the below errors and alarms to the inverter. Please note the inverter will report an error based on its own error codes so the exact words may not match. The inverter may respond according to the error code/name uploaded by the battery.

Error Codes and Solutions

Error Code	Error Name	Causes	Solutions
0	BatteryCommErr	Battery internal communication failure	1. Minor communication issues will be automatically corrected. 2. If the failure persists, please contact our after sales service provider immediately.
1	MonitorCommErr	Battery internal communication failure	
7	Discharge_OC1	Discharge current limit protection	
8	Discharge_OC2	Discharge current limit protection	
11	Cell_UV1	Battery low voltage protection	Check if the system switch is closed, if it is, please ignore this message. Otherwise, wait until the inverter can charge the battery and manually close the system switch.
12	Cell_UV2	Battery low voltage protection	
13	Cell_UV3	Battery low voltage protection	Please contact our after sales service provider immediately.
18	Charge_OC1	Charge current limit protection	1. Minor communication issues will be automatically corrected. 2. If the failure persists, please contact our after sales service provider immediately.
19	Charge_OC2	Charge current limit protection	
22	Cell_OV1	Battery high voltage protection	
23	Cell_OV2	Battery high voltage protection	
24	Cell_OV3	Battery high voltage protection	Please contact our after sales service provider immediately.
25	Charge_OT1	Battery high temperature protection	1. Minor communication issues will be automatically corrected. 2. If the failure persists, please contact our after sales service provider immediately.
26	Charge_OT2	Battery high temperature protection	
27	Charge_OT3	Battery high temperature protection	

28	Charge_UT1	Battery low temperature protection	
29	Charge_UT2	Battery low temperature protection	
32	BatteryDiff	The voltage difference of battery cells is too high	
38	BatteryLock	Battery low voltage protection	Please contact our after sales service provider immediately.
44	DischargeFault	The relays may be damaged	
45	BatteryBreak	The system air switch is open	Close the system switch and view history alarms, and then contact our after sales service provider immediately.
46	InverterCommErr	Battery fail to communicate with inverter	Please contact our after sales service provider immediately.
47	HardwareFault	Battery internal hardware failure	
48	PrecahrgeFault	The voltage difference between B+/B- and P+/P- is too high when precharge.	1. Minor communication issues will be automatically corrected. 2. If the failure persists, please contact our after sales service provider immediately.
49	DCBusFault	The voltage of P+/P- is too low when precharge.	
50	UpdateSuccess	Update success	Please ignore.
51	UpdateFail	Update fail	
52	SysRestart	System is going to restart	
53	System_OT	System high temperature protection	1. Minor communication issues will be automatically corrected. 2. If the failure persists, please contact our after sales service provider immediately.
54	System_CHG_UT	System low temperature protection	
55	System_DIS_UT	System low temperature protection	
57	BMUProcCommErr	BMU-process fail to communicate with BCU-process	
58	BlackStartErr	Battery fail to black start inverter	
59	StartFail	Battery normal start failure	