

# H2 SERIES

120/240V SPLIT PHASE

HV HYBRID INVERTER WITH MPPT

Simple  
Quick  
Powerful  
Smart  
UL9540

16A per MPPT, integrated AFCI and RSD protection, up to 4 lithium battery stacks for 87.6kWh per hybrid inverter.



H2-5K-S3-US | H2-7.6K-S3-US | H2-8.6K-S4-US

H2-10K-S4-US | H2-12K-S4-US



3-MPPT per 5/7.6kW model  
and 4-MPPT per  
8.6/10/12kW model

**16A**

16A input per MPPT supports  
high power PV modules



Recharge fast with up to  
50A of charge current  
per inverter



Manage, Monitor and Update  
sites with the Energy  
Management App for Installers

**4X**

Parallel up to four inverters  
for 48 kW of power.



AC Couple with existing  
PV Solar Systems

MODEL	H2-5K-S3-US	H2-7.6K-S3-US	H2-8.6K-S4-US	H2-10K-S4-US	H2-12K-S4-US
<b>PV String Input Data</b>					
Max. PV Array Power (Wp)@STC	7500	11400	12900	15000	18000
Max. DC Voltage (V)	600				
MPPT Voltage Range (V)	90-550				
Nominal DC Voltage (V)	360				
Start Voltage (V)	100				
Min. DC Voltage (V)	80				
Max. DC Input Current (A)	16/16/16		16/16/16/16		
Max. DC Short Current (A)	19.2/19.2/19.2		19.2/19.2/19.2/19.2		
Number of MPPT	3		4		
PV Strings per MPPT	1/1/1		1/1/1/1		
PV Switch	Integrated				
<b>Battery Input Data</b>					
Battery Type	LiFePO4				
Battery Voltage Range (V)	85-450				
Max. Charging/Discharging Current (A)	50				
<b>AC Output Data (On-grid)</b>					
AC Nominal Power (W)@240Vac	5000	7600	8600	10000	12000
Rated AC Current (A)@240Vac	20.8	31.7	35.8	41.7	50.0
Nominal AC Voltage/ Range (V)	240V / 211V to 264V				
Grid Frequency/ Range (Hz)	60				
Power Factor (cos $\phi$ )	0.8 leading-0.8 lagging				
Total Harmonic Distortion (THDi)	< 3% (at nominal power)				
<b>AC Output (Back-up Mode)</b>					
AC Nominal Power (W)	5000	7600	8600	9600	12000
Surge AC Power (VA)	6000,10s	9120,10s	10320,10s	11520,10s	14400,10s
Rated Output Voltage (V)	240 / 120				
Rated Output Frequency (Hz)	60				
<b>Efficiency</b>					
Max. Efficiency	97.6%				
CEC Efficiency	97.0%				
<b>Protection</b>					
AC Short-circuit Protection	Integrated				
Overload Protection	Integrated				
DC Overvoltage/ Undervoltage Protection	Integrated				
AC Overvoltage/ Undervoltage Protection	Integrated				
AC Overfrequency/ Underfrequency Protection	Integrated				
Over Temperature Protection	Integrated				
Anti-islanding Protection	Integrated				
AC Surge Protection	II				
DC Surge Protection	II				
AFCI Protection	Integrated				
<b>Interface</b>					
Interface	LED/APP (via Bluetooth)				
BMS Communication	RS485/CAN				
Communication for Monitoring	Wi-Fi/Ethernet/4G(Optional)				
<b>General Data</b>					
Topology	Transformerless				
Consumption at Standby (W)	< 10				
Operating Temperature Range	-40°F to 140°F (-40°C to +60°C), derated output 113°F to 140°F (45°C to 60°C)				
Cooling Method	Natural Convection				
Ambient Humidity	0%~95% Non-condensing				
Maximum Elevation	13123 ft (4000 m), derate over 9842 ft (3000 m)				
Noise Level @1m (dBA)	<30				
Ingress Protection	NEMA 4x (IP65)				
Mounting	Wall mounting				
Dimensions H*W*D	27.2*19.3*7.8 inch (690*490*198 mm)				
Weight	71 lbs (32 kg)				
Warranty (years)	10				
Safety/EMC Standard	UL 1741 SB, IEEE 1547, UL 1998, UL 9540 (with B2 battery), CAN/CSA C22.2.107.1-1, FCC, Part 15 Class B, UL 1699B, NEC690.12, IEEE 2030.5, CA RULE 21, HECO SRD V2.0, CEC				

# B2 SERIES

HIGH VOLTAGE  
LITHIUM LFP BATTERY

Simple  
Quick  
Powerful  
Smart  
UL9540

B2 batteries can be installed quickly with included DC cabling, paralleled up to 87.6 kWh per inverter, and can be monitored and updated remotely. B2 batteries are UL9450 certified with H2 inverters.



B2-7.3-HV5 | B2-14.6-HV5 | B2-21.9-HV5



Wall or ground mount



Remotely monitor and upgrade firmware



Up to 21.9 kWh in a single stack



Parallel up to four stacks for 87.6 kWh

**IP65**

NEMA 4X, outdoor design



Stack and play, DC battery cabling included

MODEL	B2-7.3-HV5	B2-14.6-HV5	B2-21.9-HV5
<b>Battery Module</b>	<b>BU2-7.3-HV5 (32S1P 102.4V72Ah)</b>		
No. of Modules	1	2	3
Rated Energy (kWh)	7.3	14.6	21.9
Usable Energy (kWh)	6.6	13.2	19.7
Dimensions (H*W*D)	31.1*31.9*5.9 inch (790*810*150 mm)	49.6*31.9*5.9 inch (1260*810*150 mm)	68.1*31.9*5.9 inch (1730*810*150 mm)
Weight	172.2 lbs (78.1 kg)	308.2 lbs (139.8 kg)	444.2 lbs (201.5 kg)
Nominal Voltage (V)	89.6-115.2	179.2-230.4	268.8-345.6
Operating Voltage (V)			
Max. Charge Current (A)	50		
Max. Discharge Current (A)	5.12	50	15.36
Rated Power (kW)		10.24	
<b>BMS Control Module</b>	<b>BC2-HV</b>		
Dimensions (H*W*D)	10.6*31.9*5.9 inches (269*810*150 mm)		
Weight	29 lbs (13.1 kg)		
<b>General Parameters</b>			
Ingress Protection	NEMA 4x (IP65)		
Altitude	< 6561 feet / 2000 m		
Mounting	Wall-Mounted/Ground-Mounted		
Operating Temperature Range	Charging: 32°F to 122°F (0°C to 50°C), Discharging: -4°F to 122°F (-20°C to 50°C)		
Ambient Humidity	5 to 95% (non-condensing)		
Cooling Method	Natural Convection		
Communication	CAN		
Warranty (years)	10		
Safety/EMC Standard	UL1973, UL9540a, UL9540 (with H2 inverter), UN38.3, RoHS		



# SBU SERIES

## SMART BACKUP UNIT

Simple  
Quick  
Powerful  
Smart  
UL9540

SBU supports whole home backup with a service entrance ready 200A transfer capacity, ports for up to 4 inverters and a port for up to a 22 kVa generator.



SBU-200



Automatic Grid, Generator  
and Inverter Transfer

200A

200A Grid and Load Capacity



Parallel up to four H2 Inverters

MODEL	SBU-200
<b>Grid</b>	
Max. Continuous AC Input Current (bypass mode) (A)	200
Max. Continuous AC Output Current (on-grid mode) (A)	160
Nominal Grid Voltage (V)	120/240
Nominal AC Frequency (Hz)	60
<b>Load</b>	
Max. Output Current (A)	200
Continuous AC Output Current (A)	160
Nominal Output Voltage (V)	120/240
<b>Inverter</b>	
Number of Inverter Inputs	4
Max. Continuous Inverter Input Current	50A*4
Inverter Input Circuit Breaker	63A*4
Inverter Nominal Voltage (V)	120/240
<b>Generator</b>	
Max. Rated Generator Power (kVA)	21600
Max. Continuous Input Current (A)	90
Generator Dry Contact Relay Specification	250V/5A
<b>Other Features</b>	
Communication to Inverter	RS485/CAN
Manual Control Bypass Switch	Yes
Cooling	Natural cooling
Noise	<35dB (@1m)
Operating Temperature Range	-13°F to 140°F (-25°C to 60°C)
Ingress Protection	NEMA 4x (IP65)
Operating Humidity (RH)	UP to 100%
Max. Elevation	9,842 ft (3000 m)
Mounting Method	Wall Mounting
Weight	18 lbs (12.5 kg)
Dimensions (H*W*D)	22.2*18.5*6.7 inch (564*470*170 mm)
Warranty (years)	10
Safety/EMC Standard	UL 1741, FCC Part15B, CSA C22.2, No.107.1