

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.

H2-7.6K-S3-US | H2-12K-S4-US



7.6kW: 3-MPPT
 12kW: 4-MPPT.

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	H2-7.6K-S3-US	H2-12K-S4-US
PV String Input Data		
Max. PV Array Power (Wp) @STC	11,400	18,000
Max. DC Voltage (V)		600
MPPT Voltage Range (V)		90 to 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
Battery Input Data		
Battery Type		LiFePO4
Battery Voltage Range (V)		85-450
Max. Charge/Discharge Current (A)		50
AC Output Data (On-grid)		
AC Nominal Power (W)@240Vac	7,600	12,000
Rated AC Current (A)@240Vac	31.7	50.0
Nominal AC Voltage/ Range (V)		240V / 211V to 264V
Grid Frequency/ Range (Hz)		60
Power Factor (cos Φ)		0.8 leading - 0.8 lagging
Total Harmonic Distortion (THDi)		< 3% (at nominal power)
AC Output (Back-up Mode)		
AC Nominal Power (W)	7,600	12,000
Surge AC Power (VA)	9,120, 10s	14,400, 10s
Rated Output Voltage (V)		240 / 120
Rated Output Frequency (Hz)		60
Efficiency		
Max. Efficiency		97.6%
CEC Efficiency		97%
Protection		
AC Short-circuit Protection		Integrated
Overload Protection		Integrated
DC Overvoltage / Undervoltage Protection		Integrated
AC Overvoltage / Undervoltage Protection		Integrated
AC Overfrequency / Underfrequency Prot.		Integrated
Over Temperature Protection		Integrated
Anti-islanding Protection		Integrated
AC Surge Protection		II
DC Surge Protection		II
AFCI Protection		Integrated
Interface		
Human Machine Interface		LED / APP (via Bluetooth)
BMS Communication		RS485/CAN
Communication for monitoring		Wi-Fi / Ethernet / 4G (Optional)
General Data		
Topology		Transformerless
Consumption at Standby (W)		< 10
Operating Temperature Range		-40°F to 140°F (-40°C to +60°C), derate output 113°F to 140°F (45°C to 60°C)
Cooling Method		Natural Convection
Ambient Humidity		0% - 95% Non-condensing
Maximum Elevation		4,000m (13,123ft), derate over 3,000m (9,842ft)
Noise Level @1m (dBA)		< 30
Ingress Protection		NEMA 4X (IP65)
Mounting		Wall mounting
Dimensions (H x W x D)		27.2 x 19.3 x 7.8 inch (690 x 490 x 198 mm)
Weight		71 lbs (32 kg)
Warranty		10 years
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 **Smart**
Quick **UL9540**
Powerful



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
Battery Module		BU2-7.3-HV5	
Number of Modules	1	2	3
Rated Energy (kWh)	7.3	14.6	21.9
Usable Energy (kWh)	6.6	13.2	19.7
L x W x H (inch)	31.1 x 31.9 x 5.9	49.6 x 31.9 x 5.9	68.1 x 31.9 x 5.9
L x W x H (mm)	790 x 810 x 150	1,260 x 810 x 150	1,730 x 810 x 150
Weight	172.2 lbs (78.1 kg)	308.2 lbs (139.8 kg)	444.2 lbs (201.5 kg)
Nominal Voltage	102.4	204.8	307.2
Operating Voltage (V)	89.6 - 115.2	179.2 - 230.4	268.8 - 345.6
Max. Charge Current (A)		50	
Max. Discharge Current (A)		50	
Rated Power (kW)	5.12	10.24	15.36

BMS Control Module

BC2-HV

Dimensions (H x W x D)	10.6*31.9*5.9 inches (269*810*150 mm)
Weight	29 lbs (13.1 kg)

General Parameters

Ingress Protection	NEMA 4X (IP65)
Altitude	< 6,561 feet / 2,000 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	10 years
Applicable 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**

Grid	
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
Load	
Max. Output Current (A)	200
Continuous AC Output Current (A)	160
Nominal Output Voltage (V)	120 / 240
Inverter	
Number of Inverter Inputs	4
Max. Continuous Inverter Input Current	50A*4
Inverter Input Circuit Breaker	63A*4
Inverter Nominal Voltage (V)	120 / 240
Generator	
Max. Rated Generator Power (kVA)	21,600
Max. Continuous Input Current (A)	90
Generator Dry Contact Relay Specification	250V / 5A
Other Features	
Communication to Inverter	RS485 / CAN
Manual Control Bypass Switch	Yes
Cooling	Natural cooling
Noise	<35dB (@1m)
Operating Temperature Range	-25°C to 60°C (-13°F to 140°F)
Protection Rating	NEMA 4X (IP65)
Operating Humidity (RH)	Up to 100%
Max. Elevation	9,842 ft (3,000 m)
Mounting Method	Wall Mounting
L x W x H (inch)	22.2 x 18.5 x 6.7
L x W x H (mm)	564 x 470 x 170
Weight	12.5kg / 27.5 lb
Warranty	10 years
Certificate	UL 1741, FCC Part15B, CSA C22.2, No.107.1

