



EP CUBE

More Flexible, More Intelligent Residential Energy Storage System **NEW**



EP Cube is a flexible and intelligent home energy storage system intended for smart management of solar power generation and residential electricity consumption. Easy to install, the device is available for remote control, with energy capacity at your discretion. Small in size, it is safe and reliable.

FEATURES



Flexible and convenient

Battery modules are easy for transport and installation.
Capacity options range from 9.9 kWh to 19.9 kWh.
A maximum of six hybrid inverters can be connected in parallel, providing up to 119.9kWh energy storage.



Cost-saving

All-in-one design saves time and cost of installation.
Multiple operating modes are cost-effective.



Power guarantee

Automates power supply in outages.
High-power electrical appliances will still run normally when the grid goes down.
Connects to generators if power failure perpetuates itself.



Safe and reliable

Lithium iron phosphate batteries
Meets the UL 9540A unit level thermal runaway propagation test performance criteria.
Adopts NEMA 4X electrical enclosure.



Compatible

Compatible with PV systems, existing or newly installed.
Allows up to 16A DC input in the PV system.
Connects to two 50A L2 EV chargers in the maximum.



Intelligent management

Monitors generation, storage and consumption of electricity in real time.
Gives a heads-up before poor weather sets it.
Enables OTA firmware and software upgrading.

EP CUBE HYBRID INVERTER + BATTERIES



Hybrid NA510G
Hybrid NA510W



Hybrid NA613G
Hybrid NA613W



Hybrid NA716G
Hybrid NA716W



Hybrid NA720G
Hybrid NA720W

EP Cube system

Hybrid inverter			1	
Battery module	3	4	5	6
Base			1	

Hybrid inverter

MPPTs			4	
Input current			I_{mp} 16A / I_{sc} 20A per MPPT	
PV maximum input voltage			600V _{DC}	
MPPT operating voltage			90V _{DC} - 550V _{DC}	
Allowable DC-AC ratio			2	
Nominal grid voltage			240V _{AC}	
Frequency			60Hz	
Maximum AC output, on-grid			7.6 kW	
Inverter CEC efficiency			93.93%	
Imbalance for split-phase loads			100%, maximum 3.8kW for each phase	

Energy storage

Total energy	9.9 kWh	13.3 kWh	16.6 kWh	19.9 kWh
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AC output, PV + battery

Full Sun, off-grid			7.6 kW, 31.6A (Continuous) I_{peak} : 90A (10s)	
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AC output, battery only

No Sun, off-grid	5 kW, 20.8A, 5.4kVA (10s)	6.5 kW, 27.0A, 7.2kVA (10s)	7.6 kW, 31.6A, 9kVA (10s)	7.6 kW, 31.6A, 10kVA (10s)
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Safety & compliance

Protections	Integrated arc fault circuit interrupter (AFCI), PV RSD *			
Certifications	UL 1699B, UL 1741-SB, IEEE 1547, IEEE 1547-1, IEEE 2030.5, UL 1998, UL 1642, UL 1973, UL 9540, UL 9540A, UN 38.3, UL 60730-1 ANNEX H, FCC Part 15 (Class B), IEEE 693-2005 (high),			
Listing	CEC, HECO			

General parameters

Enclosure	NEMA 4X			
Noise	< 50dB @ 1m, front side			
Dimensions	23.62" x 48.03" x 9.25" 600 x 1220 x 235 mm	23.62" x 56.50" x 9.25" 600 x 1435 x 235 mm	23.62" x 64.96" x 9.25" 600 x 1650 x 235 mm	23.62" x 73.43" x 9.25" 600 x 1865 x 235 mm
System weight	286.6 lbs / 130 kg	352.7 lbs / 160 kg	418.9 lbs / 190 kg	485 lbs / 220 kg
Battery module weight	70lbs / 32kg			
Inverter weight	77lbs / 35kg			
Base weight	5.5lbs / 2.5kg			
Mounting options	Floor or wall mount			
Max. elevation	9,843 ft / 3,000 m			
Ambient operating temperature	14°F to 122°F / -10°C to 50°C **			
Recommended operating temperature	32°F to 86°F / 0°C to 30°C			

Limited warranty

System warranty	> 80% capacity, up to 10 years or 6,000 cycles ***
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Notes

* PVRSD support Tigo and APSSmart transmitter. ** Performance may be de-rated in extreme operating temperatures.

*** Battery capacity warranty up to 10 years or 6,000 cycles (whichever occurs first)

EP CUBE SMART GATEWAY



Smart Gateway

Grid and load

Nominal grid voltage	120 / 240V _{AC}
Frequency	60 Hz
Max current	200A
Short circuit current protection	10 kA

Microgrid interconnection

Rated current	200A
Switchover time (on-grid / off-grid)	Seamless

EP Cube hybrid interface *

Output voltage	120 / 240V _{AC}
Overcurrent protection	40A

AC extend interface **

Output voltage	120 / 240V _{AC}
Max current	100A
Generator control request	Yes
Generator start type	2-wire start (I/O)
EV Charger communication (optional)	RS485 / CAN

Communication

Internet connection	Wifi, Cellular (LTE, 4G)
User interface	EP Cube APP (Android & IOS)

Safety & compliance

Certifications	UL1741, ICES-003 (Class B) FCC Part 15 (Class B), FCC ID IEEE 693-2005 (high)
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General parameters

Enclosure	NEMA 4X
Noise	< 50dB
Dimensions	23.62" x 23.62" x 7.09" / 600 x 600 x 180 mm
Weight	44.1 lbs / 20 kg
Mounting options	Wall mount
Max. elevation	9,843 ft / 3,000 m
Ambient operating temperature	-40 °F to 122 °F / -40 °C to 50 °C

Limited warranty

System warranty	10 years
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Notes

* The Smart Gateway EP Cube interface includes one EP Cube hybrid connection.

** The Smart Gateway includes two AC extend interface hardware.

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