



EP CUBE

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

EP CUBE PRODUCT INTRODUCTION



FEATURES



Integrated hybrid inverter
Supports DC and AC PV input
Suitable for new and retrofit PV systems



Modular and stackable design, easy to install and transport
Capacity options from 9.9 kWh to 19.9 kWh per EP Cube unit
and up to 119.9 kWh for full system



Comprehensively guarantee household power supply
Seamlessly switch to backup in case of power failure



Lithium iron phosphate batteries
UL 9540A unit level thermal runaway test certification



Supports Wi-Fi and Cellular network connection
Remotely monitor power generation and consumption
OTA firmware update, continuous function improvement



Compatible with generators for long-term power outages
Can be connected to 2@50A Level 2 EV chargers
100% green power for electric vehicles

EP CUBE HYBRID INVERTER + BATTERIES



3-Battery Stack



4-Battery Stack



5-Battery Stack



6-Battery Stack

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		
Maximum 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
AC output, PV + battery				
Full Sun, off-grid		7.6 kW, 31.6A (Continuous) 22 kVA (10s)		
AC output, battery only				
No Sun, off-grid	5 kW, 20.8A (Continuous) 7.6 kVA (10s)	6.5 kW, 27.0A (Continuous) 9.7 kVA (10s)	7.6 kW, 31.6A (Continuous) 11.4 kVA (10s)	7.6 kW, 31.6A (Continuous) 11.4 kVA (10s)
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 ***			

Notes

- * PVRSD support Tigo and APSmart 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
Communication	
Internet connection	Wi-Fi, 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)
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

Notes

* The Smart Gateway includes one pre-installed EP Cube extension port, up to six extension ports can be installed.

** The Smart Gateway includes two AC extend interfaces.

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