



EP CUBE

More flexible, more intelligent Residential Energy Storage System **NEW**





The EP Cube is a flexible and intelligent all-in-one home energy storage solution for new and existing solar installations. With unrivalled flexibility and intelligent software management, it is designed to offer a quick and easy installation, simplified logistics, and cost-savings all round to make life easier for homeowners and installers.

FEATURES



Flexible and convenient

- Modular design for easy transport and installation.
- Capacity options from 10 kWh to 40 kWh, scalable up to 200 kWh by paralleling up to 5 units. ¹
- All-in-one system with battery and inverter, or battery-ready option.



Perfect compatibility

- Compatible with existing and newly installed PV systems.
- 4 MPPTs, each allowing one string of up to 17A Impv.



Intelligent management

- Monitors generation, storage and consumption of electricity in real time.
- Automatic weather alerts help actively manage stored capacity.
- OTA (Over-The-Air) firmware upgrade.



Power guarantee

- Automatic power supply during grid outage with an optional smart gateway.
- Ensures continuous operation of high-power appliances.²



Cost-saving

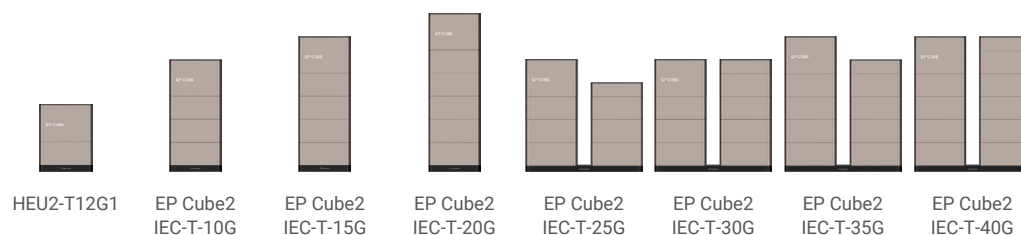
- All-in-one design saves installation time and cost.
- Automated generation and consumption.



Safe and reliable battery

- LFP technology.
- Meets the highest certification standards.
- IP67 protection.

EP CUBE (Three-Phase) TECHNICAL SPECIFICATION



System components

Type of inverter	Hybrid bidirectional							
Number of inverters	1							
Number of battery modules	0	2	3	4	5	6	7	8
Nominal capacity	-	10 kWh	15 kWh	20 kWh	25 kWh	30 kWh	35 kWh	40 kWh
Max continuous power (battery only)	-	5 kW	7 kW	10 kW	12 kW	12 kW	12 kW	12 kW
Dimensions (WxHxD mm)	600 x 766 x 285	600 x 1302 x 285	600 x 1568 x 285	600 x 1834 x 285	1350 x 1302 x 285	1350 x 1302 x 285	1350 x 1568 x 285	1350 x 1568 x 285
System weight	51 kg	135 kg	177 kg	219 kg	273 kg	315 kg	357 kg	399 kg
Base	1 (Long base will be provided for 5 or more battery modules)							

Hybrid inverter - DC Input (PV)

Max PV input power	24 kW _p
MPPTs	4
Number of inputs per MPPT	1
Max input power per MPPT	12 kW _p
Max PV input voltage	1000 V _{DC}
MPPT voltage range	85 V _{DC} - 850 V _{DC}
Max MPPT input current	17 A
Max MPPT short current	24 A
MPPT start-up voltage	80 V _{DC}

Hybrid inverter - AC On-grid

Rated AC output voltage	Three phase / 3 L / N / PE / 400 V _{AC}
Rated grid frequency	50 Hz
Max continuous power (battery + PV) ³	8/10/11/12 kVA
Max continuous AC current per phase (battery + PV) ⁴	11.6/14.5/16/17.4 A
Output power factor	~1 (adjustable from 0.8 leading to 0.8 lagging)
Total harmonic distortion @12 kW	< 3% (rated power)

Hybrid inverter - AC Back-up

Rated AC output voltage	Three phase / 3 L / N / PE / 400 V _{AC}
Rated output frequency	50 Hz
Max continuous power (battery + PV)	12 kVA
Max continuous AC current per phase (battery + PV)	17.4 A
Switching-time	< 20ms
Peak off-grid power (PV supplied)	2 times overload (10s) / 1.2 times overload (5Min)
Back-up Connections	Three phase (support unbalanced load)

Battery module

Cell technology	LiFePO ₄
Voltage range	43.2 V _{DC} ~ 58.4 V _{DC}
Nominal voltage	51.2 V
Weight	42 kg
Dimensions (WxHxD mm)	600 x 266 x 200
IP Rating	IP 67 (stacked together)

System	
Applications	Self consumption / TOU / Backup (Optional)
Type of inverter	Hybrid bidirectional
Inverter dimension (WxHxD mm)	600 x 700 x 285
Inverter weight	48 kg
Inverter topology	Transformerless
DC battery protection	MCB
Noise	< 30dB@2m
IP Rating	IP 65
Cooling type	Natural cooling
Operating altitude	3,000 m
Operating relative humidity	95% non-condensing
Operating temperature range	- 20°C to 50°C ⁵
Recommended operating temperature	0°C to 30°C
Storage temperature	-20°C ~ 0°C and / or 35°C ~ 50°C less than 1 month / 0°C ~ 35°C up to 1 year
Display	LED & APP
Installation method	Floor mounted (optional: wall mounted) ⁶
Communication interface	WIFI, RS485, CAN, IO, Ethernet
Protection	
Battery Input Reverse / Polarity Protection	Integrated
Over load Protection (DC-AC side)	Integrated
AC Short Circuit Current Protection /Output Short Circuit Protection	Integrated
Output Over Current Protection	Integrated
DC (PV+Battery) Short Circuit Current Protection	Integrated
AC Surge Protection: Grid and Back-up (SPD Type II)	Integrated
Anti-islanding Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
Ground Fault Monitoring	Integrated
Temperature Protection (Inverter + Battery)	Integrated
Integrated DC Switch (PV - Disconnecter)	Integrated
Remote stop	Integrated
Warranty ⁷	
Inverter	10 years
Battery	> 60% capacity, up to 15 years or 4.8MWh/kWh energy throughput with unlimited cycle under normal use
Accessories	2 years
Certifications	
Safety	IEC / EN 62109-1, IEC / EN 62109-2, IEC / EN 62477-1, IEC / EN 62619-1, ISO 13849, IEC 60529, VDE 2510-50, UN 38.3, IEC 63056
EMC	IEC 61000-6-3, IEC / EN 61000-6-1
Energy efficiency	IEC 61683
Grid standards	CEI 0-21, VDE-AR-N 4105, G99, G100, EN 50549-1, NL RfG Type A, CH2025, NTS 2.1, UNE 206006, UNE 217002

Notes

1. In parallel configuration, the capacity difference between the master unit and each slave unit must be ± 5 kWh.
2. An extra smart gateway is needed to support the backup mode.
3. Rated AC output power is configurable and compliant with the applicable grid code of each country.
4. Rated AC output current is compliant with the applicable grid code of each country.
5. Operating temperature range: 0 °C to 50 °C for battery charging; -20 °C to 50 °C for battery discharging. Performance will vary based on temperature and SOC level.
6. For more details, please check with the installation manual.
7. As per Limited Warranty Statement.

