



Max. Parallel
16pcs

Battery Voltage
48V

Unbalanced Output
100%

Max.Charging /Discharging Current
240A



DC couple & AC couple to retrofit existing solar system



Safer design: built-in transformer for electrical isolation



6 time periods for battery charging/discharging



Support storing energy from diesel generator

Model	HEC-T 15.36kWh(8kW)	HEC-T 20.48kWh(10kW)	HEC-T 20.48kWh(12kW)
Battery Input Data			
Battery Type	Lead-acid or Li-Ion		
Battery Voltage Range (V)	190	210	240
Max. Charging Current (A)	190	210	240
Max. Discharging Current (A)	190	210	240
External Temperature Sensor	Yes		
Charging Curve	3 Stages / Equalization		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
PV String Input Data			
Max. DC Input Power (W)	10400	13000	15600
Rated PV Input Voltage (V)	550 (160~800)		
Start-up Voltage (V)	160		
MPPT Voltage Range (V)	200-650		
Full Load DC Voltage Range (V)	350-650		
PV Input Current (A)	13+13		26+13
Max. PV ISC (A)	17+17		34+17
Number of MPPT / Strings per MPPT	2/1+1		2/2+1
AC Output Data			
Rated AC Output and UPS Power (W)	8000	10000	12000
Max. AC Output Power (W)	8800	11000	13200
AC Output Rated Current (A)	12.1	15.2	18.2
Max. AC Current (A)	18.2	22.7	27.3
Max. Continuous AC Passthrough (A)	45		
Peak Power (o_x005f grid)	2 time of rated power, 10 S		
Power Factor	0.8 leading to 0.8 lagging		
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac		
Grid Type	THD<3% (Linear load<1.5%)		
DC injection current (mA)	Three Phase		
Efficiency			
Max. E_x005fciency	97.60%		
Euro E_x005fciency	97.00%		
MPPT E_x005fciency	99.90%		
Protection			
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Surge protection		
Certifications and Standards			
Grid Regulation	EN50549,AS4777.2,VDE0126,IEC61727,VDEN4105,G99,NBT32004, CEI0-21,NRS097,NBR16149/16150,RD1699		
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1,EN61000-6-2,EN61000-6-3,EN61000-6-4		
General Data			
Operating Temperature Range (°C)	-45~60°C , >45°C derating		
Cooling	Smrat cooling		
Noise (dB)	<45 dB		
Communication with BMS	RS485; CAN		
Weight (kg)	33.6		
Size (mm)	422W x 702H x281D		
Protection Degree	IP65		
Installation Style	Wall-mounted		
Warranty	5 years		

RESIDENTIALESS

THREE-PHASE ESSENTIAL SOLUTION

SCALABLE · RELIABLE · EFFICIENT

Hiconics Three-phase ESS is your exclusive home solar energy assistant that reduces the reliance on grid, as to help storing energy & powering your home.



Hiconics Eco-energy Drive Technology Co., Ltd., is a listed company founded in 2003 (stock code: 300048). We became a member of Midea Group in April 2020. Now Hiconics belongs to Midea Industrial Technology Business Group (MITBG). Up until now, Hiconics' registered capital has reached USD267 million, with 200+ patents and 1200+ employees globally.

We have our specialties in INDUSTRIAL AUTOMATION & GREEN ENERGY MANAGEMENT.

We have been dedicated to providing you with stable and innovative products, as well as sustainable power solutions in the past decades.

We are greater than just a manufacturer: we are an innovator, a solution provider, and an alliance.

1200+

Employees

200+

Related patent certifications

\$13.67M

R&D investment/year

30+

Countries & regions where Hiconics products are sold to



Reliability

- Powered by the safest CATL LFP cells
- Overall test: Crush Test, Bonfire Test, Impact Test, Water-proofed Test
- Adopt Self-heating Long Cycle Life Technology

Efficient

- Deep discharge >95%
- Provide more usable power

Effortless

- Modular design, easy to expand (Max. 16 pcs parallel)
- BMS smart management system, remote & real-time control

Residential ESS

Three-phase ESSENTIAL Standard Solution

Max. Capacity
80kWh

Cycle Life
>6000

DOD
>95%

Protection Level
IP54



Reliability

The safest type of LFP battery.
BMS intelligent control system
Lower voltage solution, less risk of electric arc occurrence



Flexibility

Suitable for variable of power & capacity, meet further expansion requirements
Support floor/wall mounting installation

Model	HEC-Cabinet-LV-20K			
Battery type	LFP (LiFePO4)			
Operating Voltage Range(V)	44.8~57.6 (Rated 48V)			
Rated Voltage(V)	51.2			
Number of battery pack	1	2	3	4
Parallel	Max. 16			
Energy Capacity(kWh)	5.12	10.24	15.36	20.48
Rated DC power(kW)	2.5	5	7.5	10
Max Output Current(A)	100	200	250	250
Rated Output Current(A)	50	100	150	200
Max. Charging Current(A)@0~25°C	100	200	250	250
Depth of Discharge (DoD)	95%			
Cycle Life	≥ 6000 (25°C)			
Dimensions W x D x H(mm)	387*581*133	392*591*391	392*591*584	392*591*777
Weight(kg)	45(no stand)	93(with 2 stands)	139.5(with 3 stands)	186(with 4 stands)
IP Class	IP54			
Cooling Type	Natural Convection			
Operating Temperature Range	-20~45			
Humidity	0~95% (No condensation)			
Max. Operation Altitude	< 2000m			
Communication	RS485/RS232/CAN			
Certification	UL1973/IEC62619/CE-EMC/FCC/UN38.3			

