Uhome

American ESS split-phase All-in-one 10kW&10/20/40kWh

FEATURES

<10ms

The instantaneous UPS switch over less than 10ms , critical load never loses power

>10 Hours

Continuous off-grid full load for over 10 hours

Parallel

Support 6 inverter in parallel

210A

Support battery 210A discharging current

99%

Aftersales contentment of APP&Web is over 99%

Diesel &Grid

Support diesel&grid

199$

Built-in DC breaker, reducing $199 installation cost

>95%

Discharging efficiency of battery's useable energy is over 95%

Technical Specifications

Model	Uhome-INV10-B20
Input (DC)	
Max DC Power(kW)	15
Max DC Voltage(V)	500 Vd.c.
MPPT Voltage Range(V)	120...500 Vd.c.
Nominal Voltage(V)	335
Start Operation Voltage (V)	125
Max Input Current (A)	14
Number of MPPT	4
Number of String per MPPT	1
DC Switch	Integrated
Battery Input	
Battery Charge Method	Self-adaption to BMS
Max Charging Voltage(V)	58V
Battery Voltage Range(V)	40-58V
Max Charge/Dis Charge Current(A)	190/210A
Max Charge/Dis Charge Power(W)	10000/10000
Output(AC)	
Norminal Apparent Power(VA)	10000
Max Apparent Power(VA)	11000
Max Input Power(VA)	11000
Grid Type	L1,L2,N,PE
Norminal Frequency(Hz)	50/60
Norminal Voltage(V)	110-120/220-240V(split phase), 208(2/3 phase),230 (single phase)
Max Output/Input Current(A)	45.8
THDi(Rated power)	<3%
PF	-0.8~+0.8
Switch Time	10ms(Typical)
AC Output(Back-up)	
Rated Power(kVA)	10
Rated Output Voltage(V)	120/240
Max Output Current(A)	45.8
Rated Frequency(Hz)	50/60 Hz
Automatic Switching Time(ms)	<10
THDv(100%R Load)	<2
Overload Capacity	125%<Load≤135%，60S，Load>150%1S
Output Parallel(Pcs)	6
Efficiency	
Max Efficiency(BAT to AC)	≥98.2%
Max Efficiency(PV to AC)	≥98.0%
CEC Efficiency	≥97.2%
Max MPPT Efficiency	≥98.0%
General Parameters	
GFCI	YES
Anti-islanding Protection	YES
PV String Input Reverse Polarity Protection	YES
Output Over Voltage Protection	YES
Output Over Current Protection	YES
Insulation Resistor Detection	YES
AFCI	YES
RSD	YES
General Parameters	
Operating Temperature Range	-25~60 C (>45 C derating)
Relative Humidity	0~95%
Max Altitude(m)	>2000m derating
Electronics Protection Degree	IP54/NEMA 3R
Topology Type	Transformerless
Night Self Consumption(W)	<25
Cooling	Forced air cooling

Technical Specifications

Dimension (L × W ×H)	650*400*1820mm
Weight	220kg(10kWh)/320kg(20kWh)
Noise(db)	<38
HMI	APP/LCD
COM	RS485/CAN/WIFI/4G/Bluetooth(Optional)
Certification	
Safety	UL1741, CSA C22.2 No. 107.1:16,UL1998
EMC	FCC Part 15 ClassB
Grid Code	IEEE1547, CPUC Rule21, SRD V2.0, UL1741 SA, UL1741
EMC	FCC Part 15, Class B
On-grid	IEEE 1547, IEEE 2030.5, Hawaii Rule 14H, Rule 21 Phase I,II,III,NRS

Model		LFP 5000A	
Total Energy*		10.0kWh	20.0kWh
Usable Energy(DC)*		9.2kWh	18.4kWh
Cell Type		LFP（LiFePO4）	
Voltage(In parallel)		48~56Vd.c	
Nominal Voltage(In parallel)		51.2Vd.c	
Max Continuous Charge Current (A)		120A	200A
Max Continuous Discharge Current (A)		120A	200A
Max Charge Voltage(In parallel)		57.6Vd.c	
Protection Degree		IP20	
Max Altitude (m)		4000 (>2000m derating)	
Operating Temperature	Charge	From 0~50℃	
	Discharge	From -10~55℃	
WIFI Frequency Range		2400MHz~2483MHz	
Humidity		＜60%(No condensed water)	
Installation Location		Ground-Installation	
Cooling Type		Natural cooling	
Warranty		10 years	
Communication		CAN/ RS485	
Safety		UL 1973, UL 9540A	
Hazardous Material Classification		9	
Transportation		UN 38.3	
Certification		UL 1973 / UL 9540A/EMC	

Test method: Under STC condition, discharge to 2.5V at 0.5c constant current, and let it stand for 30min; Charge to 3.65V at 0.5c constant current, let it stand for 5min, then charge to 3.65V at 0.05c, and let it stand for 30min. Discharge at a constant current of 0.5c until the voltage reaches 2.5V to cut off the energy released.
Optional high-performance version, supporting the maximum continuous current of 200A application conditions.
Maximum continuous discharge current: The maximum continuous discharge current is affected by temperature and SOC state.
STC: Temperature: 25±5℃, Humidity: 15%~90% RH, Air pressure: 86kPa~106kPa.