# **RESIDENTIAL ENERGY STORAGE SOLUTIONS All-In-One UHOO Series**









Portable Power Stations Residential Energy Storage Solutions Lithium Battery Packs



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## WHY WE NEED ENERGY STORAGE SYSTEM?



Save the planet

If you have troubles of taking full use of your solar system, and want to use more clean energy to become more environmental friendly.



#### Be power independent

When power outage occurs, whatever you are doing, like laundering, partying or carcharging has to stop.

#### Friendly to appliances Improve the utility grid quality, and be friendly to your home appliances.



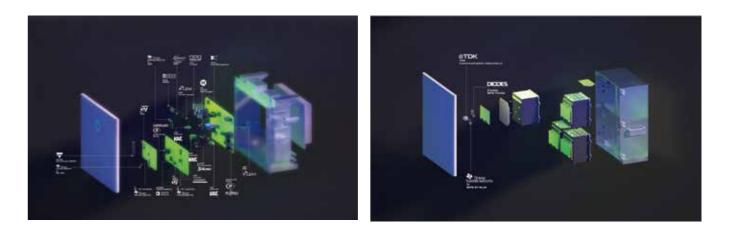
#### Maximize your savings

If you want to save money by reducing your electricity bills to pursue more important things.



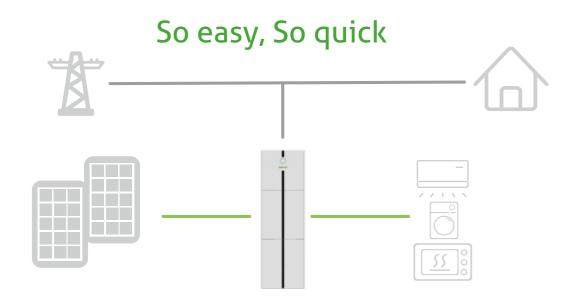
### UHOO: All in One, One for All

### We choose first-class suppliers!

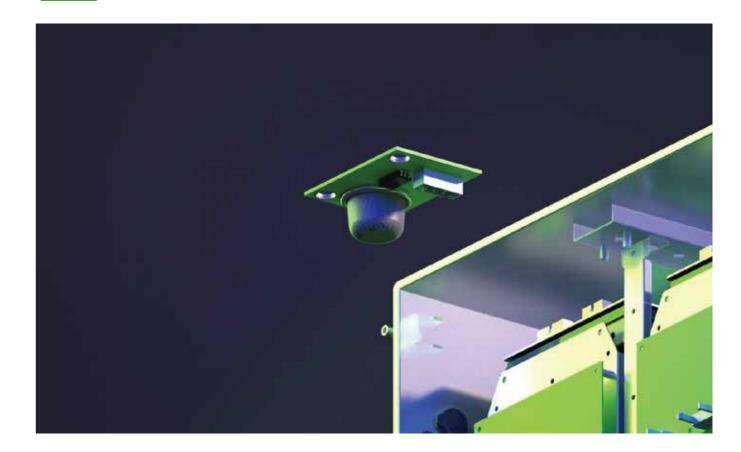


### Active detection to prevent failures and danger! First used in residential BESS

### Home Battery Storage System



All in One, One for All



LiFePO<sub>4</sub>, best for residential storage system



### UHOO: All in One, One for All



- High system power density, with 89Wh/kg .
- Battery preinstalled, more convenient for on - site installation.
- Ō No more other accessories.



- UPS level provide backup power
- Switching time<10ms - Make you feel no perception of power outages



Noise < 25db Super quiet, in and out. Enjoy your life



### IP65

Choose the place you want to install Balcony, garage, home wherever is ok

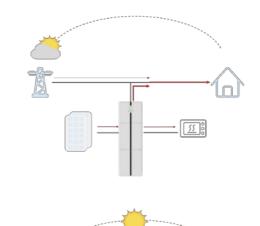
More efficient More resilient Improved temperature cycle

### What can UHOO Series do?

### Mode A: Self-Power Even there is no sunlight, you can still use the stored clean energy day and night.

Normally, the clean energy generated by your solar system can be almost used up by your home rather than fed into the utility grid. In this way, you are making more contribution to reduce the carbon emission. Besides, you can save money by less using the peak hour electricity.

#### Maximize the use of the clean energy.



#### Sunny time at noon, or low home energy needs

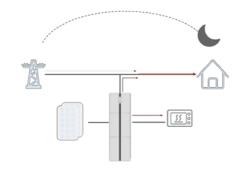
When there is enough solar power to support home energy consumption, the extra solar power will be charged to the battery in UHOO Series later use.

And if the battery is fully charged, the solar energy will be fed into the utility grid.

### No sunlight at night or cloudy days

When at night or in cloudy days, the solar panels can't generate any power, the battery in UHOO Series will discharge to support your home energy needs.

And if the your home energy needs is high, the utility grid will help.







#### Not too much sunlight in morning, at dusk, in bad weather or high home energy needs

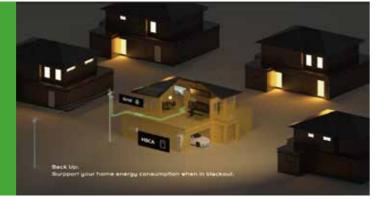
When there is not enough solar power to support home energy consumption, battery will discharge by UHOO Series to meet power needs, using the stored energy till fully consumed.

And if the solar panels and battery still can't cover the energy consumption, the utility grid will be used.

### What can UHOO Series do?

### Mode B: Back up

The switching time less than 10ms allows your appliances uninfluenced. Just keep focusing on your things.



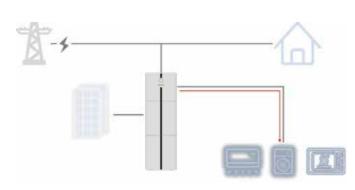
We can imagine how bad it is when some unexpected power outages happen, especially when you are enjoying family time with your children, having party with your friends, or doing important work. Back up function is absolutely important for such accidents. And it is real with UHOO Series that in whichever mode, it always protect you from this situation.

### Mode C: Load shifting

Always using the cheaper energy from the utility grid, and saving money everyday.

### Always make sure that you use the cheaper energy

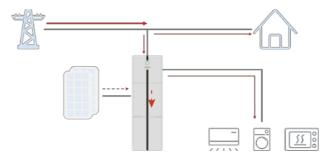
### No worry about days without power.

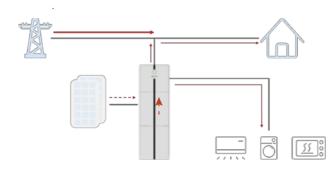


#### Power outage at night or cloudy days

When a power outage occurs, your important appliances connected to the UHOO Series EPS port will remain working until the stored energy is used up.

Usually 10kWh capacity will help you get through a whole day.











When you choose load shifting mode, you can use cheaper power UHOO Series. UHOO Series will charge battery at off peak hour when the electricity price is low.

### Peak hour: discharge to the house

Furthermore, UHOO Series will discharge to meet your home energy needs at peak hour when the electricity price is high. In this case, you can always use the power at a lower price.

Still, the EPS will work when there is an outage.

# **Enest** The master of your home energy



Energy access View energy usage in real time

Let every second of energy use be mastered.





History

Energy heatmap



### Insight Insights into home energy use.

The insight will let you know more about how your home energy is consumed, like whether energy is being wasted.

Better improve your behaviors to reduce carbon emissions and save the planet.

#### **Other services**

Carbon Track Collaboration VPP

Customize Customize as you like.

Self-powered (by default), Load shifting and Back up modes, choose the best one for you.











Notice



### **UHOO Series** Home Battery Energy Storage System



### **Product Introduction**

UHOO, a hybrid all in one BESS, compatible with high volatge LFP battery system, can achieve the best function to maximize clean solar power usage for your home.

### Convenient

Heat stimulation for the best layout

### Adaptative

Self-power, backup, and load shifting modes

### Quiet

Less than 25 db, no noise pollution

### Independent

No additional modules and inverters are required

### Flexible

IP65 up to 6kW, 5/10kWh optional

### Smart

Support VPP and AIOT

• UHOO will store photovoltaic or grid energy. If there is not enough solar energy to support consumption, the battery will be discharged by UHOO to meet the power demand.

• Autonomous strategy.

#### Technical parameters

Model	HBCA-3.6-5 HBCA-3.6-10	HBCA-4.6-5 HBCA-4.6-10	HBCA-5-5 HBCA-5-10	HBCA-6-5 HBCA-6-10	
PV Input					
bsolute max Voltage (d.c.V)			600		
MPPT Voltage Range (d.c.V)			100550		
Max. DC Input Power (W)	4800	6200	6650	8000	
Start-up Voltage (d.c.V)			90		
Rated Operating Voltage (d.c.V)			360		
Max. Input Current (d.c.A)	12.5/12.5				
Max. inverter backfeed current to array (d.c.A)	0				
lsc PV (d.c.A)			18/18		
NO.of MPPT Trackers			2		
NO.of Strings per MPPT Tracker			1		
Battery Model	MF204	425	М	F40925	
Battery Capacity	LiFePO4 5.			PO4 10.24kWh	
Nominal Battery Voltage (d.c.V)	204		Lifer	409.6	
Battery Voltage Range (d.c.V)	160227.2		· · · · · · · · · · · · · · · · · · ·	320454.4	
Max. Charge/Discharge Current (d.c.A)	1002	27.2	25/25	J204J4.4	
Cycling times			6500		
			0,000		
AC Input/Output					
Rated output Power (W)	3600	4600	5000	6000	
Rated Apparent Power to Grid (VA)	3600	4600	5000	6000	
Max. Apparent Power to Grid (VA)	3600	4600	5000	6000	
Max. Apparent Power from Grid (VA)	7200	9200	10000	12000	
Rated Voltage (a.c.V)		22	0/230/240		
Rated Frequency (Hz)			50/60		
Rated AC Current to Grid (a.c.V)	15.6	20	21.7	26.1	
Max.output current (a.c.A)	17.2	22	23.9	28.7	
Max. Current from Grid (a.c.A)	312	40	43.4	52.2	
Inrush current (a.c.A)		16 a.c.A (peal	k), 11.3 us (duration)		
Max.output fault current (a.c.A)	57 (peak), 40 (rm s)				
AC output Maximum output overcurrent protection (a.c.A)	40				
AC input power factor	-0.8_+0.8				
AC output power factor	1(-0.8.+0.8 a djusta ble)				
THDi			<3%		
EPS Output (With Battery)					
Max. Output Power (W)	3600	4600	5000	6000	
Rated Apparent Power (VA)	4320	5520	6000	7200	
Max. Apparent Power (VA)	4320	5520	6000	7200	
Rated Voltage (a.c.V)			30 (±2%)		
Norminal Frequency (Hz)			/60 (±0.2%)		
Max. Output Current (a.c.A)	18.8	24	26.1	313	
Inrush current (a.c.A)			k), 11.3 us (duration)		
Max. output fault current (a.c.A)		57 (pe	ea k), 40 (rm s)		
EPS output Maximum output overcurrent protection (a.c.A)			40		
Switch time (ms)			<10		
THDv @Linear Load (%)			<2		
Power Factor		-	0.8+0.8		
Efficiency					
PV Max. Efficiency (%)			97.6		
PV Europe Efficiency (%)			97		
PV Max. MPPT Efficiency (%)			99.9		
Battery Charge by PV Max. Efficiency (%)			98		
Battery Discharge Efficiency (%)			96.7		
Protection					
Over/Under voltage protection			Yes		
DC isolation protection			Yes		
DC injection monitoring	Yes				
Residual current detection	Yes				
Anti-islanding protection	Yes				
Over load protection	Yes				
Battery Input reverse polarity protection	Yes				
PV reverse polarity protection			Yes		
Surge protection			Yes		
Over heat protection			Yes		
General Data	MF20	425		MF40925	
Dimension (W/D/H)(mm)	550°233°1125 655°302°1390		550°233°1750		
Dimension of Packing (W/D/H)(mm)	655*302*1390 68		655*302*2085		
Net weight (kg)	68 78		115		
Gross weight (kg)	78		10.155	130	
Operation Temp ( C )		-	10_+55		
Rela tive Humidity (%)			095		
Altitude (m)			≤3000		
Ingress Protection			IP65		
Cooling			Natural		
Inverter Topology			n-isola ted		
Over voltage category		Ⅲ(4	AC), Π(DC)		
Protective class			Class I		
Ac tive a nti-islanding method			uency shift		
Hum an Interface			LED/APP		
BMS Communication Interface		RS	5485/CAN		
Meter Communication Interface			RS485		
Noise Emission (dB)			<25		
Standby Power Consumption (W)			<5		
Safety and Approvals					
		IEC62040.1:	2019 IEC 62109-1&-2		
Safety			UN38.3 IEC60730-1		
Safety EMC		IEC62619	UN38.3 IEC60730-1 019 EN IEC 61000-6-3:2021		

