

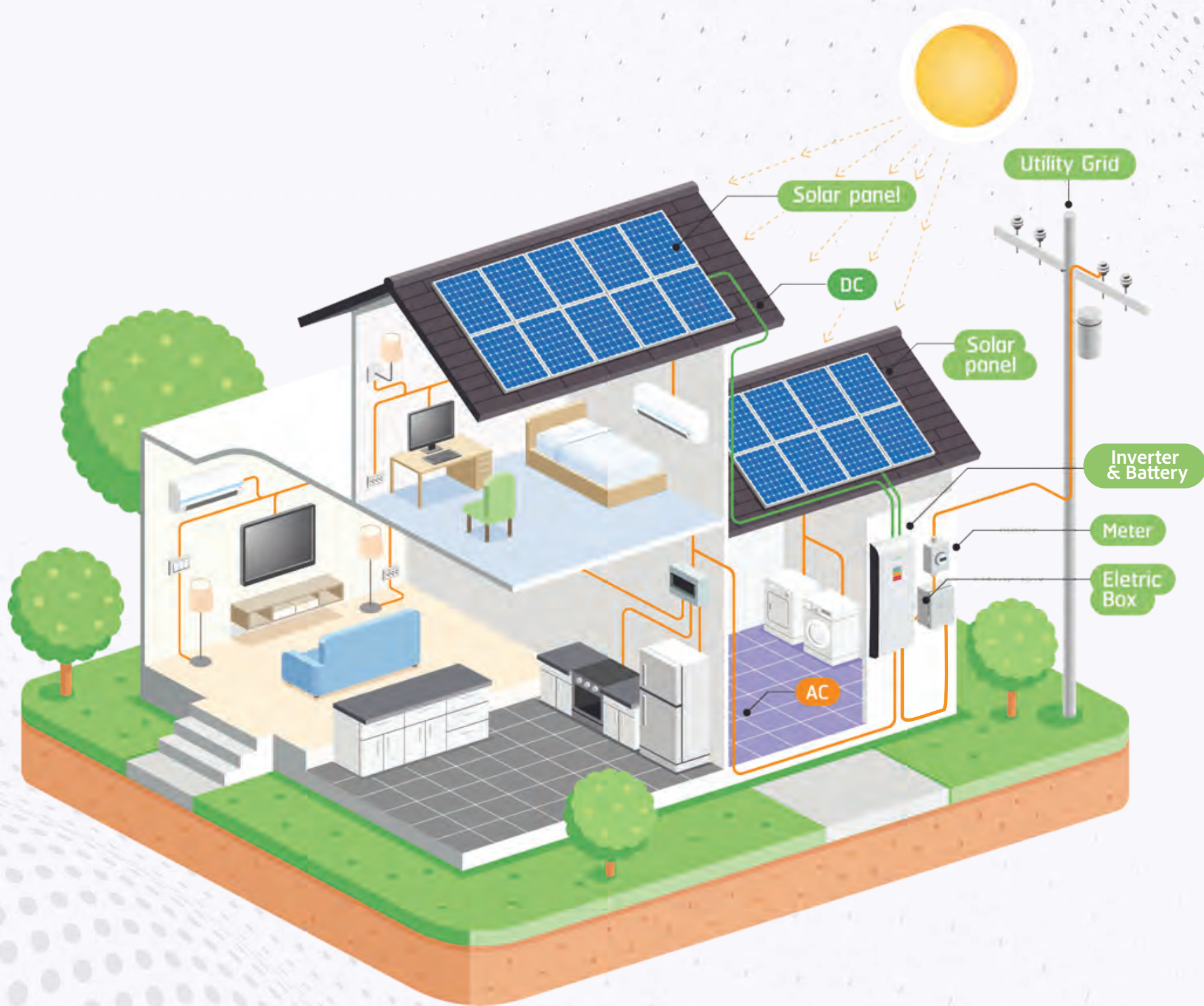


# ANKL@US

*Energy Storage*

Product Catalog 2022





## MORNING

*Minimal energy production,  
high energy needs*

At sunrise the solar panels start to produce energy, though not enough to cover the morning energy needs. The Anklous energy storage batteries will bridge the gap with the stored energy from the previous day.

## MIDDAY

*Highest energy production,  
low energy needs.*

In the daytime the energy generated from the solar panels is at its peak. But since nobody is home the energy consumption is very low so that most of the generated energy is stored in the Anklous energy storage batteries.

## EVENING

*Low energy production,  
high energy needs.*

The highest daily energy consumption is in the evening when the solar panels produce little or no energy. The Anklous energy storage batteries will cover the energy need with the energy produced in the daytime.



# ALL-IN-ONE ENERGY STORAGE SYSTEM



Flexible settings for a variety of working modes. Built-in timer for various mode of on/off operation



Multiple communication for RS232, Wi-Fi.



Scalable lithium battery design, 10-20KWH lithium battery can be selected



Hybrid inverter, support grid-connected power sales. Pure cosine wave output, friendly to electrical equipment.



Stacked design, easy to install.



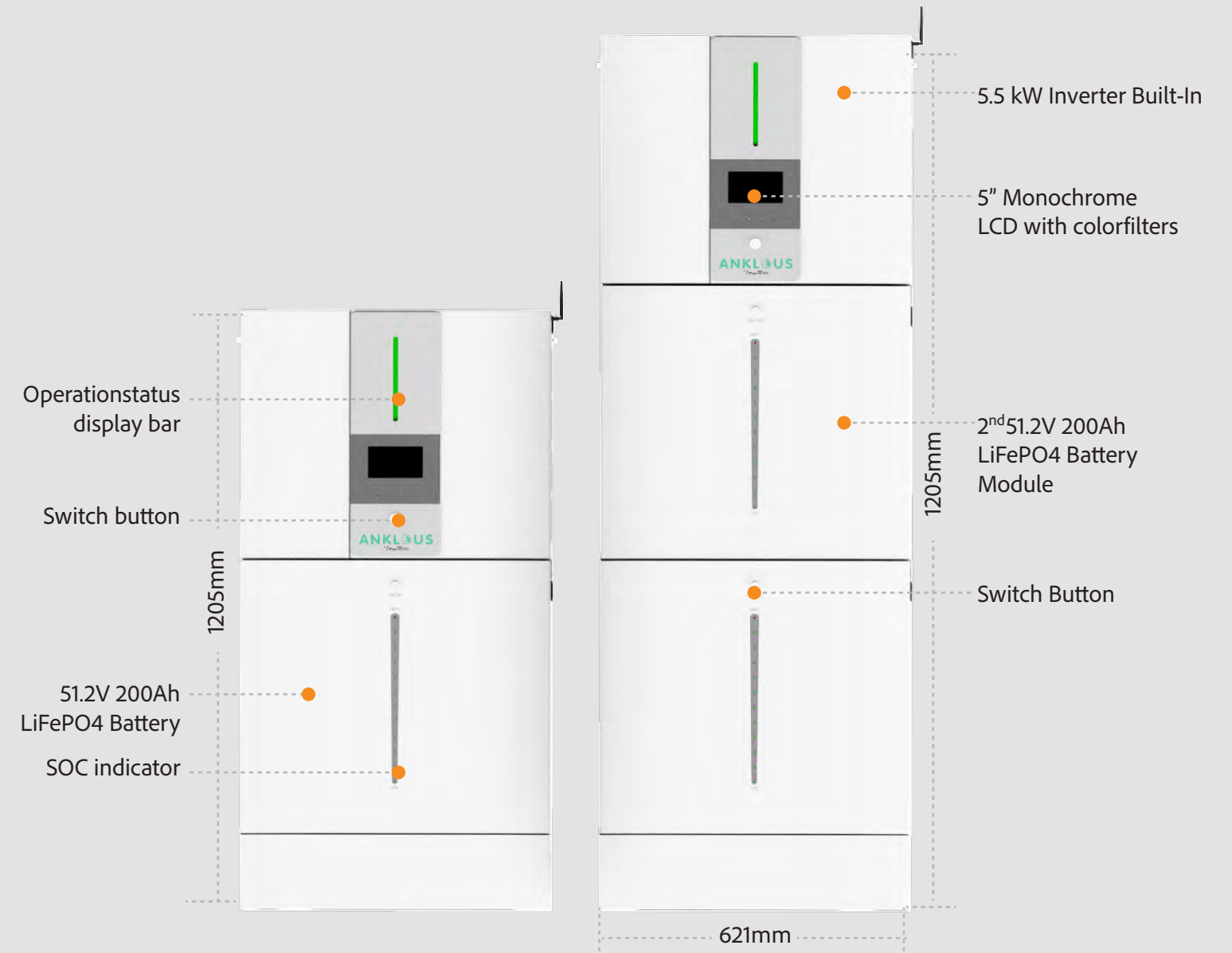


# Technical Specifications

SKU	AKS-TGESS10240AI	AKS-TGESS2048AI
<b>Inverter</b>		
Maximum PV Input Power	6500W	
Rated Output Power	5500W	
Maximum Charging Power	5000W	
<b>PV INPUT (DC)</b>		
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 500 VDC	
Start-Up Voltage / Initial Feeding Voltage	116 VDC / 150 VDC	
MP Voltage Range	120 VDC ~ 450 VDC	
Number of MPP Trackers / Maximum Input Current	2/2 x13 A	
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	208 / 220 / 230 / 240 VAC	
Output Voltage Range	184 - 264.5 VAC*	
Maximum Output Current	23.9 A*	
Maximum Conversion Efficiency (DC / AC)	96%	
European Efficiency @ nominal	95%	
<b>AC INPUT</b>		
AC Start-Up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC	
Acceptable Input Voltage Range	170 - 280 VAC	
Maximum AC Input Current	40 A	
<b>BATTERY MODE OUTPUT (AC)</b>		
Nominal Output Voltage	208 / 220 / 230 / 240 VAC	
Efficiency (DC to AC)	93%	
<b>Battery Technical Specifications</b>		
Nominal DC Voltage	51.2 VDC	
Battery Capacity	200Ah	400Ah
Maximum Operating Current	120 A	200 A
Energy	10.24kWh	20.48kWh
Full Charge Voltage (FC)	56 V	
Full Discharge Voltage (FD)	45V	
Protection	BMS, Breaker	
Inner Resistance	≤ 20m Ω	
Cycle Life	≥10,000Cycle *	

System Parameters		
Net Weight	Approx.140kg	Approx.235kg
Dimension, Dx WxH (mm)	214 x 621 x 1205	214 x 621 x 1755
Operating temperature/ humidity range	0-55°C/0-80%RH	
Protocol	WIFI and RS232	

\* Tested under specific conditions.  
\* These figures may vary depending on different AC voltage and country regulation.





# ALL-IN-ONE ENERGY STORAGE SYSTEM



Built-in single phase hybrid Inverter (5/6kW)



Energy capacity from 5.22kwh to 15.66 kWh with 1 to 3 battery module configuration.



Stacked battery design, easy installation and operation, plug and play.



IP54 protection, support indoor and outdoor installation



Remote configuration and upgrade, manage your energy at fingertip



## Inverter Specification

Inverter Specification	AKS-INV-HB5000	AKS-INV-HB6000
Efficiency		
Max.Efficiency (PV to Grid)	97.3%	
Max.Efficiency (Battery to Load)	94%	
Input (PV)		
Max.Input Voltage	550V	
Rated Input Voltage	360V	
.Input Current	15A	
Max Max.Short Circuit Current	20A	
Start Input Voltage	90V	
MPPT Operating Voltage	70V-520V	
Range Max.Number of PV	2	
Strings No. of MPPTs	2	
Input (Battery)		
Battery Type	Lithium-ion	
Nominal Battery Voltage	48V	
Max.Charge/Discharge Current	120A	
Lithium-ion Battery Charge Curve	Self-adaption to BMS	
THDI	<3% (Rated Power)	
Output (Grid)		
Rated AC Active Power	5000W	6000W
Max. AC Active Power	5500W	6000W
Rated AC Voltage	230V	
AC Voltage Range	180V-275V(Adjustable)	
Rated Grid Frequency	50Hz/60Hz	
Max.AC Current Output to Utility Grid(A)	25A	27.2A
Output (EPS)		
Nominal Output Power	5000VA	6000VA
Nominal Output Voltage	230V	
Nominal Output Frequency	50Hz/60Hz	
THDV	<3%@100% R Load	
Switching Time(Optional)	10ms	

## Technical Specifications

### Battery Module

	AKS-BSG-5220
Nominal voltage [V]	51.2
Operating voltage range [V]	45.6-56.2
Total energy [kWh]	5.22
Standard power [kW]	2.56
Max. power [kW]	5
Recommended char/discharge current [A]	50/50
Max. charge/discharge current [A]	100
Cycle life	10,000 cycles*
Expected life time /	>10 years
Available char/ discharge temp range [°C]	-20~+50
Protection	IP54
Dimensions (L*W*H) [mm]	515*200*350
Weight [kg]	45 Kg
Warranty	5 Years Product Warranty 10 Years Performance Warranty

\*Tested under specific conditions.  
\* These figures may vary depending on different AC voltage and country regulation.



## Smart energy at your fingertip

- Remote access to the system.
- With the app you can monitor production and energy consumption of your battery. Set your preferences to optimize your energy independence, the protection against blackouts or energy savings.
- Thanks to instant alerts and access to distance, you can control your plant anywhere anytime.







## POWER WALL SERIES



24/7 Backup  
Protection



Power the  
whole house



Wall-mount design,  
easy to install



Expandable, support  
up to 10x parallel



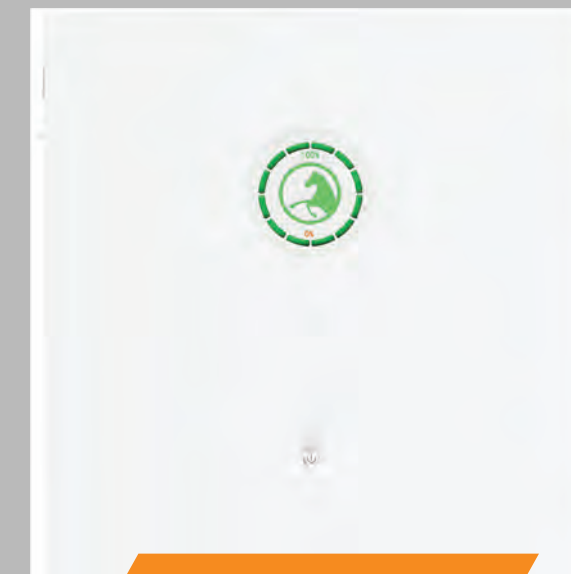
## Technical Specifications

Model/SKU	AKS-TG5120W	AKS-TG10240W	AKS-TG10240WP
Nominal Voltage	51.2V		
Capacity	100Ah	200Ah	200Ah
Energy	5.12 kWh	10.24 kWh	10.24 kWh
Internal Resistance	≤30m Ω		
Cycle Life	≥10,000 cycles*		
Design Life	≥10 years		
Charge Cut-off Voltage	56.0V±0.5V		
Max. Continuous Work Current	100A		
Discharge Cut-off Voltage	45V±0.2V		
Charge Temperature	0°C~55°C		
Discharge Temperature	-20°C~55°C		
Storage Temperature	-40°C~55°C @ 60% +25% relative humidity		
Protection	IP20	IP20	IP65
Dimensions	680 × 485 x180 mm	680 × 485 x220 mm	620 × 570 x266 mm
Weight	Approx: 62kg	Approx: 95kg	Approx: 95kg
Protocol	RS232-PC RS485(B)-PC RS485(A), CANBUS		
Certification	UN38.3, MSDS, UL1973(Cell), IEC62619(Cell)		
Warranty	5 Year Product Warranty, 10 Year Performance Warranty		

\*Tested under specific conditions



AKS-TG5120W / AKS-TG10240W



AKS-TG10240WP

## Product Range



**AKS-ESBOX3**



**AKS-ESBOX5**



**AKS-ESBOX6**



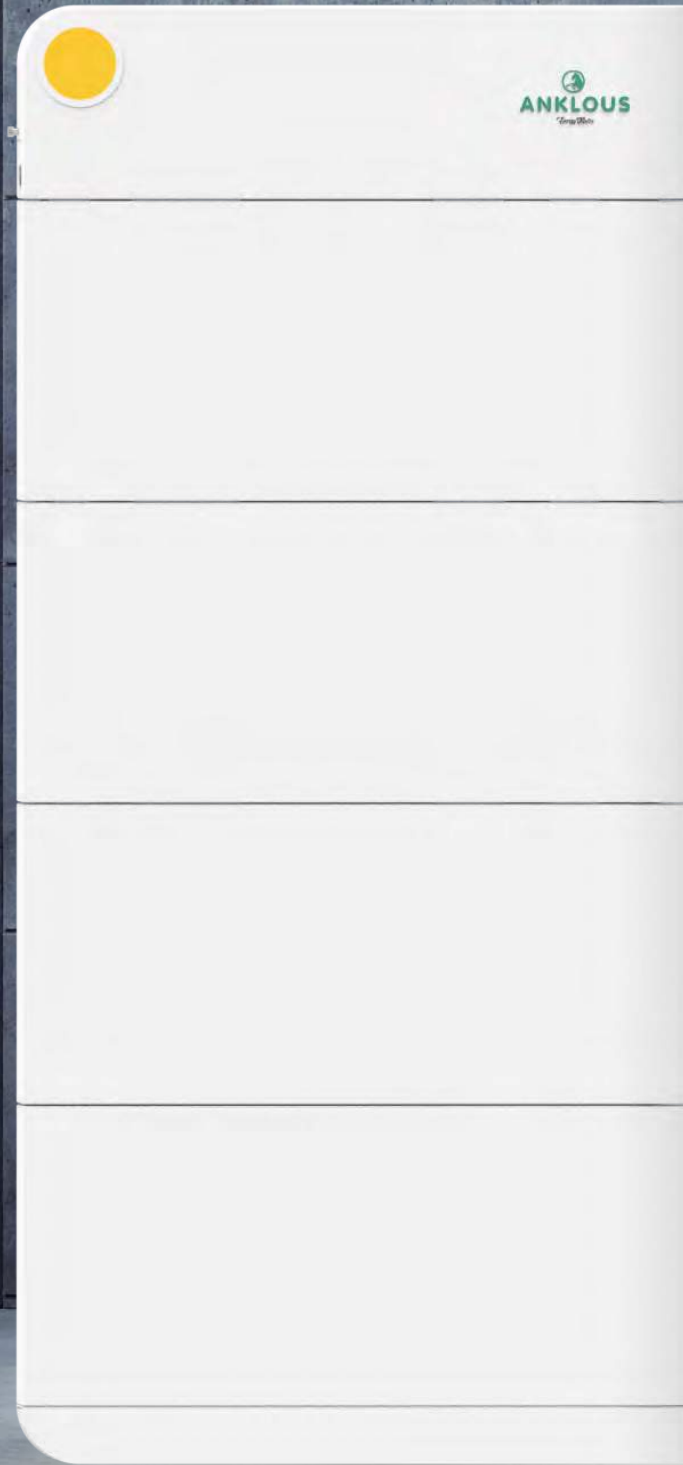
**AKS-ESBOX7**

### Features:

- Low self discharge
- Fast & Efficient Charging
- NO maintenance requirements
- In parallel: Max. 10 units
- LCD SCREEN

	AKS-ESBOX3	AKS-ESBOX6	AKS-ESBOX5	AKS-ESBOX7
Nominal Voltage:	51.2V -16S			
Nominal Capacity:	102AH	96AH	196AH	196AH
Nominal energy:	5.22 kWh	4.96 kWh	10 kWh	10 kWh
Operation voltage range:	40.0V-57.6V			
Standard charge current:	20A	20A	40A	40A
Max. Continuous charge current:	100A			
Standard discharge current:	20A	20A	40A	40A
Max. Continuous discharge current:	100A			
Temperature sensor protection:	65 °C			
Charging temperature:	0~45 °C			
Working Temperature:	-20~60 °C			
Over-current Fuse:	120A			
Cycle life:	6000 times (80%DOD )			
Communication:	RS485/RS232/CAN			
Size:	543*505*162mm	480*170*650mm	673*618*193mm	450*650*235mm
Net Weight (KG):	45KG	49KG	89KG	88KG
Warranty	5 years product warranty 10 years performance warranty			





# POWER WALL BATTERIES HV SERIES



Support a variety of  
communications



Products cover  
10-25KWH capacity



The product supports  
parallel connection



Simple design.  
Easy installation



## Technical Specifications

Model	AKS-Box - 10000w/HV	AKS-Box-20000w/HV	AKS- Box-25000w/HV	AKS- Box-30000w/ HV
Nominal Voltage	204.8V (64 series)	307.2V (96 series)	409.6V (128 series)	512V (160 series)
Capacity	50Ah	50Ah	50Ah	50Ah
Energy	10 kWh	15 kWh	20 kWh	25 kWh
Internal Resistance	≤80m Ω	≤100m Ω	≤120m Ω	≤150m Ω
Cycle Life	≥10,000 cycles *			
Design Life	≥10 years			
Charge Cut-off Voltage	228V ± 0.5V	340V ± 0.5V	450V ± 0.5V	560V ± 0.5V
Max. Continuous Work Current	100A			
Discharge Cut-off Voltage	180V ± 0.5V	270V ± 0.5V	350V ± 0.5V	440V ± 0.5V
Charge Temperature	0°C~60°C			
Discharge Temperature	-20°C~60°C			
Storage Temperature	-40°C~55°C @ 60% +25% relative humidity			
Dimensions	630*185*930 mm	630*185*1265 mm	630*185*1600 mm	630*185*1935 mm
Weight	Approx: 130kg	Approx: 180kg	Approx: 230kg	Approx: 280kg
Protocol	RS232-PC, RS485(B)-PC RS485(A)-Inverter, CANBUS-Inverter			
Certification	UN38.3, MSDS, UL1973(Cell), IEC62619(Cell)			
Warranty	5 Year Product Warranty, 10 Year Performance Warranty			

\*Tested under specific conditions





# RACK ENERGY STORAGE BATTERY



Support multiple communication protocols with a variety of inverters



Configurable from 15-80kWh, with or without cabinet



The product supports parallel connection and expansion



4U standard rack-mount battery design



Convenient installation, no need for traditional cabinet as an option



## Technical Specifications



Model	Box - 48300	Box-48400	Box-48500	Box-48600	Box-48700	Box-48800
Nominal Voltage	48V /51.2 V (optional)					
Capacity	300Ah	400Ah	500Ah	600Ah	700Ah	800Ah
Energy	15 kWh	20 kWh	25 kWh	30 kWh	35kWh	40kWh
Internal Resistance	≤60m Ω					
Cycle Life	≥10, 000 cycles *					
Design Life	≥10 years					
Charge Cut-off Voltage	53V + 0.5V(15S) 56.0V + 0.5V(16S)					
Max. Continuous Work Current	200A	300A	400A	400A	400A	400A
Discharge Cut-off Voltage	45.5V + 1.0V(15S) 48V + 1.0V(16S)					
Charge Temperature	0°C~60°C (Under 0°C extra heating mechanism)					
Discharge Temperature	-20°C~60°C (Under 0°Cwork with reduced capacity)					
Storage Temperature	-40°C~55°C @ 60% +25% relative humidity					
Dimensions	600 × 600 x 988 mm	600 × 600 x 1166 mm	600 × 600 x 1388 mm	600 × 600 x 1610 mm	600 × 600 x 1833 mm	600 × 600 x 2055 mm
Weight	240 kg	300kg	360kg	420kg	480kg	540kg
Protocol	RS232-PC, RS485(B)-PC RS485(A)-Inverter, Canbus-Inverter					
Certification	UN38.3, MSDS, UL1973(Cell), IEC62619(Cell)					
Warranty	5 Year Product Warranty, 10 Year Performance Warranty					

Model	Box - 48600	Box-48600	Box-481000	Box-481200	Box-48 1400	Box-48 1600
Nominal Voltage	48V /51.2 V (optional)					
Capacity	600Ah	800Ah	1000Ah	1200Ah	1400Ah	1600Ah
Energy	30 kWh	40 kWh	50 kWh	60 kWh	70 kWh	80 kWh
Internal Resistance	≤60m Ω					
Cycle Life	≥10, 000 cycles*					
Design Life	≥10 years					
Charge Cut-off Voltage	53V + 0.5V(15S) 56.0V + 0.5V(16S)					
Max. Continuous Work Current	200A	300A	400A	400A	400A	400A
Discharge Cut-off Voltage	45.5V + 1.0V(15S) 48V+ 1.0V(16S)					
Charge Temperature	0°C~60°C (Under 0°C extra heating mechanism)					
Discharge Temperature	-20°C~60°C (Under 0°Cwork with reduced capacity)					
Storage Temperature	-40°C~55°C @ 60% +25% relative humidity					
Dimensions	600 × 600 x 988 mm	600 × 600 x 1166 mm	600 × 600 x 1388 mm	600 × 600 x 1610 mm	600 × 600 x 1833 mm	600 × 600 x 2055 mm
Weight	350 kg	460kg	570kg	680kg	780kg	900kg
Protocol	RS232-PC, RS485(B)-PC RS485(A)-Inverter, Canbus-Inverter					
Certification	UN38.3, MSDS, UL1973(Cell), IEC62619(Cell)					
Warranty	5 Year Product Warranty, 10 Year Performance Warranty					

\*Tested under specific conditions



# ALL-IN-ONE ESS | STACK SERIES-HIGH VOLTAGE



Programmable supply priority for PV, battery or Grid;



Built-in timer for various mode of on/off operation;



Multiple communication for Wi-Fi/4G;



Scalable lithium battery design, 20-40KWH lithium battery can be selected



Hybrid inverter, support grid-connected power sales;



Pure cosine wave output, friendly to electrical equipment;



System IP65 rain-proof design, environment-friendly, ultra-quiet design;



## Technical Specifications

Model (Inverter)	TG-8KH3E	TG-10KH3E	TG-12KH3E
<b>PV INPUT (DC)</b>			
Maximum PV Input Power	10.4KW	13KW	15.6KW
Max. PV voltage		1000V	
MPPT maximum Input Current		12.5A*2	
MPPT Voltage Range		180~850	
Number of MPP Trackers		2/1	
<b>AC side output</b>			
Max. output power	8.8KW	11KW	13.2KW
Max. output current (AC)	12.7A	15.9A	19.1A
Nominal voltage/ range	400/360-400		
AC Output Frequency	50/60Hz		
PF	0.8cap~0.8ind		
Output THDI	<3%		
Grid Type	3W+N+PE		
<b>EPS Output</b>			
Rate AC Output Power	8.8kW	11kW	13.2kW
Rated grid voltage (V)	400V		
AC Output Frenquecny	50/60Hz		
Automatic switchover time	≤20ms		
Output THDI	≤2%		
Certification	CE, TUV		
Overload capacity	60s@110%, 30s@120%, 10s@150%		

<b>General Data</b>					
MPPT efficiency (%)	99.5%	99.5%	99.5%	99.5%	99.5%
CE Efficiency (%)	97.2%	97.5%	97.5%	97.5%	97.5%
Maximum efficiency (%)	97.9%	98.2%	98.2%	98.2%	98.2%
Battery charge/ discharge efficiency (%)	96.6%	96.7%	96.7%	96.8%	96.8%
Standby power consumption (W)	≤3W				
Noise emission(dB)	35dB				
<b>Battery Parameters</b>					
Battery Configuration	4 Modules	5 Modules	6 Modules	7 Modules	8 Modules
Nominal DC Voltage	204.8	256	307.2	358.4	409.6
Battery Capacity	100Ah	100Ah	100Ah	100Ah	100Ah
Energy(kWh)	20.48	25.6	30.72	35.84	40.96
Maximum Discharging Current	50A				
Cycle Life	10,000 Cycles *				
Certification	UN38.3, MSDS, UL1973(Cell), IEC62619(Cell)				
<b>System General Data</b>					
Temperature range	-20 ~ 60°C				
Environment humidity	0-95%				
Dimensions (H*W*D) mm	1170*830*547	1340*830*547	1510*830*547	1680*830*547	1850*830*547
Net Weight (kg)	280	325	370	420	470
Communication	WIFI/4G				

\*Tested under specific conditions





# ANKLOUS

*Energy Master*

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