eCactus-TH

THREE PHASE HOME BATTERY

VOLTA ECO SYSTEMS

The product features a shiny silver color design with a mirror-like logo, which exhibits subtle color variations under different lighting conditions.

Product Introduction

Agave-TH, a high-efficiency three-phase high voltage hybrid all-in-one BESS. Modular design, always ready for power upgrade, better function for bigger clean energy usage.

G99
COMING SOON
ASK FOR DETAILS

FRIENDLY

Max 16/26A DC input current per string, compatible with 210 PV modules
Up to 110%three-phase unbalanced output

FLEXIBLE

Cable free connection, saving 75% installation time between modules

FRIENDLY

IP65, indoor or outdoor application.
<25dB, no noise pollution

SCALABLE

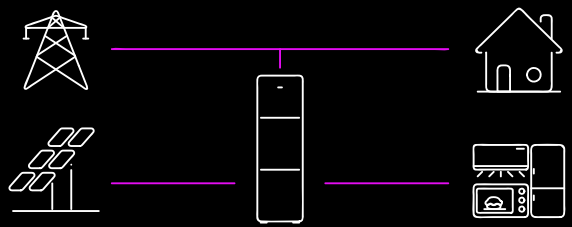
Maximum of 5 units in parallel, covering a capacity range up to 149.76kWh

SAFE

4-layer protection design.
Long life cell, highest safety standards-UL9540A

SMART

VPP, EV and Diesel Generator ready. Remote updates & self-diagnosis



- eCactus-TH will store photovoltaic or grid energy. If there is not enough solar energy to support consumption, the stored battery power will be discharged by Agave-SH to meet the power demand.
- Autonomous strategy, automatically optimising energy use based on the user's needs and preferences.

eCactus-TH

Technical parameters

VOLTA ECO SYSTEMS

Model	WH-TIA502	WH-TIA602	WH-TIA802	WH-TIA103	WH-TIA123	WH-TIA133
PV Input						
Absolute max Voltage (d.c.V)	1000					
MPPT Voltage Range (d.c.V)	180...980					
Max. DC Input Power (W)	10000	12000	16000	20000	20000	20000
Start-up Voltage (d.c.V)	145					
Rated Operating Voltage (d.c.V)	620					
Max. Input Current (d.c.A)	16/26					
Isc PV (d.c.A)	32/20					
NO. of MPP Trackers	2					
NO. of Strings per MPP Tracker	2/1					
Battery Model						
Battery Type	LFP					
Battery Voltage Range (V)	160...700					
Battery Module	4.992kWh, 96V					
Number of Battery Module [1]	2...6					
Battery Capacity (kWh)	9.98...29.9					
Max. Charge/Discharge Current (A)	30/30					
AC Input/Output						
Rated output Power (W)	5000	6000	8000	10000	12000	13000
Rated Apparent Power to Grid (VA)	5000	6000	8000	10000	12000	13000
Max. Apparent Power to Grid (VA)	5000	6600	8000	10000	12000	13000
Rated Apparent Power from Grid (VA)	10000	12000	16000	17900	17900	17900
Max. Apparent Power from Grid (VA)	10000	12000	16000	17900	17900	17900
Rated Voltage (a.c.V)	3/N/PE;220/380 3/N/PE;230/400 3/N/PE;240/415					
Rated Frequency (Hz)	50/60					
Rated AC Current to Grid (A)	7.3	8.7	11.6	14.5	17.4	18.9
Max. AC Current to Grid (A)	8.1	9.6	12.8	16.0	19.2	20.8
Rated AC Current from Grid (A)	14.6	17.4	23.2	26.0	26.0	26.0
Max. AC Current from Grid (A)	16.2	19.2	25.6	26.0	26.0	26.0
Inrush Current (A)	16 a.c.A (peak), 11.3 us (duration)					
Max. Output Fault Current (A)	52 (peak), 37 (rms)					
AC Output Maximum Output Overcurrent Protection (A)	37					
AC Input Power Factor	-0.8...+0.8					
AC Output Power Factor	1 (-0.8...+0.8 adjustable)					
THDi	< 3%					
EPS Output (With Battery)						
Rated. Output Power (W) [2]	5000	6000	8000	10000	12000	13000
Peak Output Apparent Power (VA) @ 60 sec	10000	12000	16000	16000	16000	16000
Rated Voltage (V)	3/N/PE;220/380 3/N/PE;230/400 3/N/PE;240/415					
Nominal Frequency (Hz)	50/60 (±0.2%)					
Rated Output Current (A)	7.3	8.7	11.6	14.5	17.4	18.9
Max. Output Fault Current (A)	52 (peak), 37 (rms)					
EPS Output Maximum Output Overcurrent Protection (A)	37					
Switch Time (ms)	< 10					
THDv @ Linear Load (%)	< 2					
Power Factor	-0.8...+0.8					
Efficiency						
PV Max. Efficiency (%)	98.5					
PV Europe Efficiency (%)	97					
PV Max. MPPT Efficiency (%)	99.9					
Battery Charge by PV Max. Efficiency (%)	98.5					
Battery Discharge Efficiency (%)	98.5					
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						
Dimension (W/D/H) (mm)	600*350*1875 (four battery modules, with foundation)					
Hybrid Inverter Net weight (kg)	40					
Operation Temperature (°C)	-20...+55					
Relative Humidity (%)	0...95					
Altitude (m)	<=3000					
Ingress Protection	IP65					
Cooling	Natural					
Inverter Topology	Non-isolated					
Over Voltage Category	III(AC), II(DC)					
Protective Class	Class I					
Active Anti-islanding Method	Frequency shift					
Human Interface	LED/APP					
BMS Communication Interface	RS485/CAN					
Meter Communication Interface	RS485					
Noise Emission (dB)	< 25					
Standby Power Consumption (W)	< 10					

* 1 There are installation space restrictions in some scenarios. The optimal number of batteries to be installed is less than or equal to 4.
* 2 Depends on the voltage and the discharge current of the batteries connected.