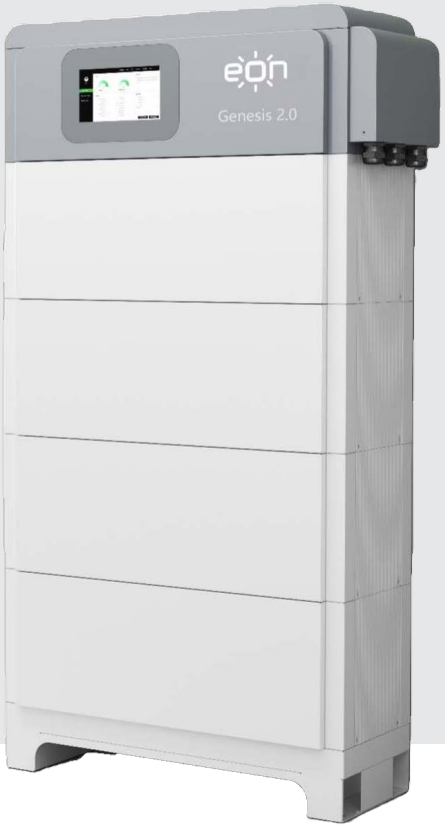
Genesis 2.0

Stackable Modular LV Battery System



Scalability: The system can be expanded with up to 15 systems in parallel, offering flexibility and future-proofing for growing energy needs.

High Efficiency: Designed for peak shaving and self-consumption, it helps reduce energy bills by optimizing the use of solar power and minimizing reliance on the grid .

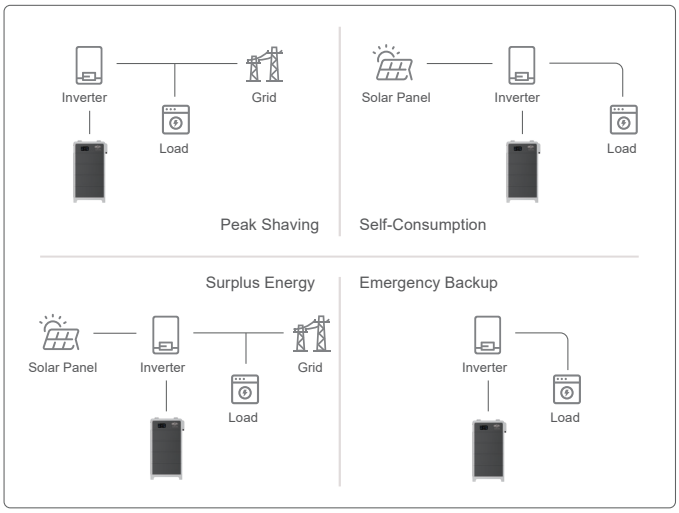
Strong Compatibility: The system is designed to work seamlessly with various inverters and energy management systems, providing flexibility in integration with existing setups.

Comprehensive Warranty: Backed by a 10-year warranty, the Genesis 2.0 LV system assures long-term peace of mind and protection for the investment .

Wi-Fi Connectivity and APP Control: Enables remote monitoring and management of the energy storage system through a dedicated mobile application, enhancing user convenience and control.

Product Details

System Layout



Application Scenarios

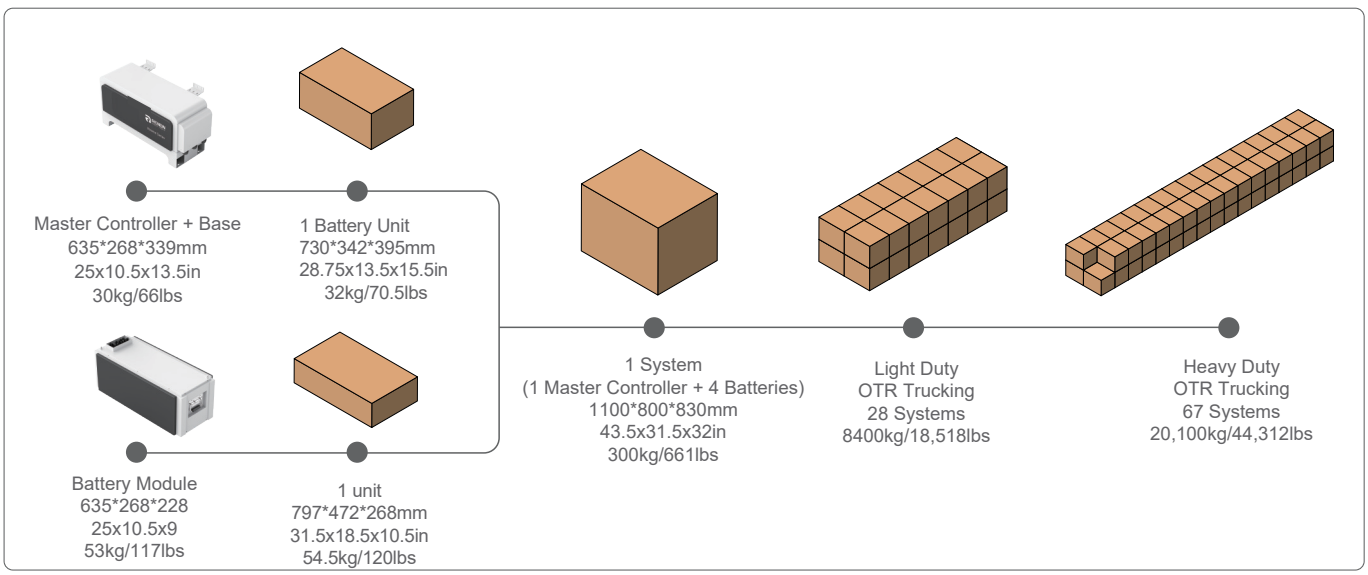
Battery Energy Storage(4.8/5.12V)	2 Modules	3 Modules	4 Modules	5 Modules	6 Modules
Nominal Energy (kWh)	9.6/10.24	14.4/15.36	19.2/20.48	24/25.6	28.8/30.72
Max. Operation Current (A)	190	285	300	300	300
Peak for 10s (A)	196	297	392	490	500
Peak for 2s (A)	240	360	480	500	500
Max. Charging Voltage (Vdc) Discharge	54.75/58.4				
Cut-off (Vdc)	40.5/43.2				
Nominal Voltage (Vdc) Recommend	48/51.2				
Charging Voltage(Vdc) Dimension	53.25/56.8				
(W*D*H)	635*268*795mm 25x10.6x31.3in	635*268*1023mm 25x10.6x40.3in	635*268*1250mm 25x10.6x49.2in	635*268*1478mm 25x10.6x58.2in	635*268*1705mm 25x10.6x67.1in
Net Weight (Approximate)	141kg/311lbs	194kg/428lbs	247kg/545lbs	300kg/661lbs	353kg/778lbs

General Parameters	
Scalability	Max. 15 systems in parallel
Storage Conditions	–20°C ~ 55°C(0°C ~ 35°C Recommended) Up to 90%RH, non-condensing Initial SoC: 50%
Operating Temperature	Charge: 0°C to 50°C / 32 to 122°F Discharge: -20°C ~ 50°C / -4 to 122°F
Cooling	Natural Cooling
Max. Altitude	2000m / 6561ft
Cycle Life	8000 Cycles
Communication	RS485, CAN, WiFi

System Characteristic	
Battery Compliances	UL1973,UL9540, UL9540A UKCA, IEC 62619, IEC62040 CEI 0-21, UN 38.3, EN-61000, EN-62311
Installation Method	NaturaLCooling
Installation Scene	Indoor or Outdoor
IP Rating	IP65
Warranty [1]	10 Years

[1] Please refer to the warranty letter for details

Packaging & Shipping Details



North America: 15K-2P-N

Datasheet

UL: Limitless 15K-LV

Input Data (PV)	
Max. Allowed PV Power (STC)	19,500W
Nominal Voltage Range	175 - 425V
Startup Voltage	125V
Max. Input Voltage	500V
Max. Input Current per MPPT	26A (self-limiting)
No. of MPP Trackers	3
No. of PV Strings per MPPT	2
Max. AC Coupled Input	19,200W
Output Data (AC)	
Nominal AC Voltage	120/240V, 120/208V, 220V
Grid Frequency	50 / 60Hz
Real Power, max continuous	15,000W
Max. Output Current	62.5A
Real Power, max continuous (batteries only, no PV)	12,000W (50A @ 240V)
Peak Apparent Power (10s, off-grid)	24,000VA @ 240V
Peak Apparent Power (100ms, off-grid)	30,000VA @ 240V
Max Output Fault Current (5s)	94A with PV, 75A (batteries only, no PV)
Max Output Fault Current (100ms)	120A
Max. Grid Passthrough Current	200A
Power Factor Output Range	+/- 0.9 adjustable
Backup Transfer Time	5ms
CEC Efficiency	96.5%
Max Efficiency	97.5%
Design (DC to AC)	Transformerless DC
Stackable	Up to 12 in parallel
Battery Input Data (DC)	
Battery Technologies	Lithium / Lead Acid
Nominal DC Voltage	48V
Operating Voltage Range	43 - 63V
Capacity	50 – 9900Ah
Max. Battery Charge / Discharge Current	275A
Charging Controller	3-Stage with Equalization
Grid to Battery Charging Efficiency	96.0%
External Temperature Sensor	Included
Current Shunt for Accurate % SOC	Integrated
Automatic Generator Start	Integrated
Communication to Lithium	CANBus & RS485
General Data	
Dimensions (H x W x D)	807 x 494 x 306 mm / 31.8 x 19.4 x 12 in
Weight	61.2 Kg / 135 lb.
Enclosure	IP65 / NEMA 3R
Ambient Temperature	-25~55°C, > 45°C Derating
Noise	< 30 dB
Idle consumption - No Load	90W
Wi-Fi & LAN Communication	Included
Standard Warranty	10 Years
Protection and Certifications	
Electronics Certified Safety by SGS Labs to NEC & UL Specs - NEC 690.4B & NEC 705.4/6	Yes
Grid Sell Back – UL1741-2010/2018, IEEE1547a 2003/2014, FCC 15 Class B, UL1741SB, CA Rule 21, HECO Rule 14H	Yes
PV DC Disconnect Switch – NEC 240.15	Integrated
Ground Fault Detection – NEC 690.5	Integrated
PV Rapid Shutdown Control – NEC 690.12	Integrated
PV Arc Fault Detection – NEC 690.11	Integrated
PV Input Lightning Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
AC Output Breaker - 200A	Integrated
200A x 2 Battery Breaker / Disconnect	Integrated
Surge Protection	DC Type II / AC Type II