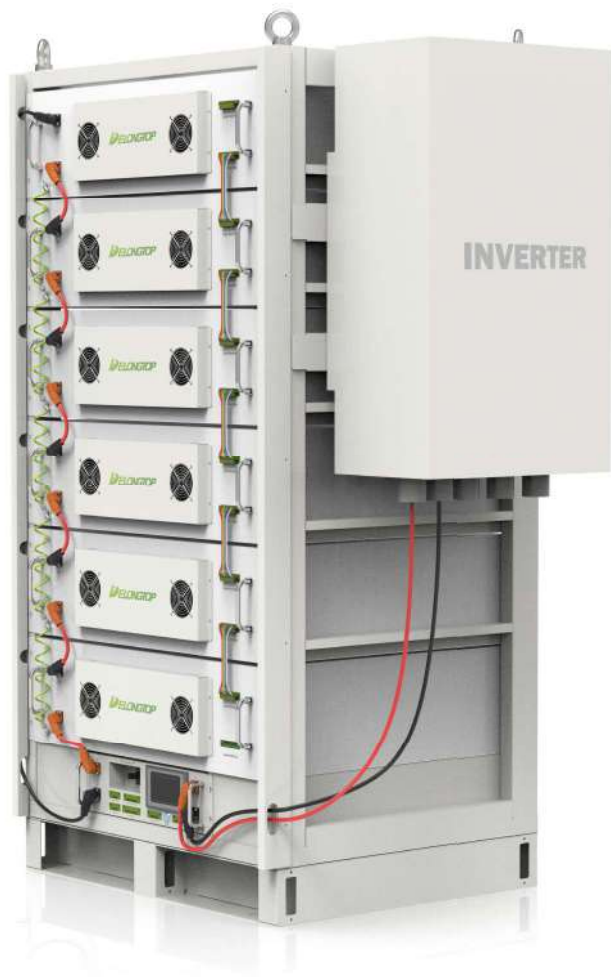


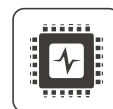
HVR32-ESS

96Kwh & 172Kwh High Voltage Energy Storage System

ELONGTOP



High Scalability.



Multiple Protection:



LiFePO4:
Higher safe
performance and
longer cycle life.



Wide Compatibility:
Compatible with
leading inverter
brands.



Industrial and
commercial energy storage



Distributed
energy



Micro-grid



Battery change
station

BATTERY DATA

96Kwh & 172Kwh High Voltage Energy Storage Battery

Models	1P32S157Ah	1P32S280Ah
Single Battery Module		
Energy Capacity	16Kwh	28.6Kwh
Max. Output Current	50A	84A
Nominal Voltage	102.4V	102.4V
Operating Voltage	96~112V	96~112V
Dimensions (L/D/H)	544mm x 781mm x 200mm	882mm x 745mm x 242mm
Battery System Data		
Number of Modules	6	6
Energy Capacity	96Kwh	172Kwh
Standard Charge / Discharge Current	45A / 0.3C	84A / 0.3C
Nominal Voltage	614.4V	614.4V
Operating Voltage	576~672V	576~672V
Dimensions (L/D/H)	595mm x 790mm x 1620mm	925mm x 790mm x 1840mm
Weight	≈850Kg	≈1580Kg
Battery Cell Type	LiFePO4 Battery(Lithium iron phosphate battery)	
Enclosure Protection Rating	IP20	
Round-trip Efficiency	≥90%	
Operation Tem.	-10°C to +50°C	
Applications	ON Grid / ON Grid + Backup / OFF Grid	
Communication Port	CAN	
BMS Monitoring Parameters	SOC,System voltage,Current,Cell voltage, Cell temperature	

Inverter Technical Data

Model	SUN-29.9K-SG01HP3 -EU-BM3	SUN-30K-SG01HP3 -EU-BM3	SUN-35K-SG01HP3 -EU-BM3	SUN-40K-SG01HP3 -EU-BM4	SUN-50K-SG01HP3 -EU-BM4
Battery Input Data					
Battery Type	Lithium-ion				
Battery Voltage Range (V)	160-800				
Max. Charging Current (A)	50+50				
Max. Discharging Current (A)	50+50				
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	2				
PV String Input Data					
Max. PV Access Power (W)	59800	60000	70000	80000	100000
Max. PV Input Power (W)	38870	39000	45500	52000	65000
Max. PV Input Voltage (V)	1000				
Start-up Voltage (V)	180				
MPPT Voltage Range (V)	150-850				
Rated PV Input Voltage (V)	600				
Max. Operating PV Input Current (A)	36+36+36			36+36+36+36	
Max. Input Short-Circuit Current (A)	55+55+55			55+55+55+55	
No. of MPP Trackers/ No. of Strings MPP Tracker	3/2+2+2			4/2+2+2+2	
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	29900	30000	35000	40000	50000
Max. AC Input/Output Apparent Power(VA)	29900	33000	38500	44000	55000
Rated AC Input/Output Current(A)	45.4/43.4	45.5/43.5	53.1/50.8	60.7/58	75.8/72.5
Max. AC Input/Output Current(A)	45.4/43.4	50/47.9	58.4/55.8	66.7/63.8	83.4/79.8
Max. Continuous AC Passthrough (grid to load) (A)	200				
Peak Power (off-grid) (W)	1.5 times of rated power, 10s				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65				
Grid Connection Form	3L+N+PE				
Total Current Harmonic Distortion THDi	<3% (of nominal power)				
DC Injection Current	<0.5% In				
Efficiency					
Max. Efficiency	97.6%				
Euro Efficiency	96.5%				
MPPT Efficiency	>99%				
Equipment Protection					
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	RS485/RS232/CAN				
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)				
General Data					
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude	2000m				
Noise(dB)	≤65				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (WxHxD mm)	527×894×294 (Excluding Connectors and Brackets)				
Weight (kg)	80				
Type of Cooling	Intelligent Air Cooling				
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy				
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98 G99, VDE-AR-N 4105				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				