

Sol-Ark Commercial Energy Solutions

A global energy technology leader with over 6 generations of hybrid inverters

Deep engineering expertise in smart energy solutions

A track record of results. For over a decade, Sol-Ark has been solving complex energy challenges with innovation and technology

Powered by a vast ecosystem including thousands of distributors, installers, EPCs, integrators, and battery manufacturers

Trusted by global Fortune 500 companies in telecommunications, retail, big tech, restaurants, and the largest space agency in the world

208V Outdoor and Indoor

Battery Energy Storage System

Battery Model:	L3 HVR-60	L3 HV-40
SKU:	L3-HVR-60KWH	L3-HV-40KWH
System Data		
Compatible Inverter	Sol-Ark 30K-3P-208V-N	
Environmental Rating	Outdoor	Indoor
Cell Chemistry	Lithium Iron Phosphate	
Battery Cabinet Capacity	61.44 kWh	40.96 kWh
System Usable Energy ¹	55.30 kWh	36.86 kWh
Built-In DC Disconnect Rating	200A	
Internal Fuse Rating	160A	
Real Power (backup) Per Inverter	30 kWac	
Max DC-Coupled Solar Per Inverter	39 kWac	
Max AC-Coupled Solar Per Inverter	54 kWac	
Max Battery Cabinets Per Inverter	6	16
Maximum Inverters Per System	6 ² 10	
Recommend Depth of Discharge	90%	
System Nominal Voltage	307V	410V
System Operating Voltage	294V – 336V	392V – 448V
Charge/Discharge Current ³		
Recommend	100A	50A
 Nominal/Continuous 	100A	
 Peak Discharge (2 min @ 25°C) 	125A	
System Roundtrip Efficiency	90% (25C, 0.5C)	
Product Dimensions (WxDxH)	76x107x226 cm (30x42x89 in)	58x58x163 cm (23x23x64 in)
Net Weight	950 kg (2,095 lbs)	628 kg (1,384 lbs)
Mounting Type	Outdoor Enclosure	Freestanding Rack Mount
Operating Temperature ⁴	-10°C – 50°C (14°F – 122°F)	4°C – 43°C (40°F – 110°F)
Humidity	5%-85% RH	
Operating Altitude ⁵	3000m (9,843 ft)	
	$-4^{\circ}F - 95^{\circ}F$	
Storage Conditions ⁶	Up to 85% RH (non-condensing) State of Charge (SOC) 30%	
la sue as Datia s	IP55 (NEMA 3R)	IP20 (NEMA 1)
Ingress Rating Noise Level @ 1m	75 dBA at 30°C (86°F)	< 40 dBA at 30°C (86°F)
Seismic Zone	· · · · · ·	40 dBA at 50 C (66 F)
Communication Ports	CAN2.0/RS485	
Battery Module Specifications		
Battery Module Configuration	6s2p	8s1p
Battery Module Energy	5.12	
Battery Module Nominal Voltage	51.2V	
Battery Module Nominal Capacity	100Ah	
Warranty and Certification		
Performance Warranty ⁷	10 years or 196MWh Throughput	10 years or 130MWh Throughput
Product Warranty	10 Years	
Certifications	UL1973, UL9540, UL9540a, UN38.3, FCC, Prop 65	

1. DC usable energy, test conditions: 90% DOD, 0.3C charge and discharge at 25°C. Usable system energy may vary due to system configuration parameters.

2. For larger outdoor installations use the Sol-Ark Mega Ark.

3. Output current is affected by battery temperature and SOC.

4. Temperature is based on the average cell temperature as measured by the BMS. Battery charging is disabled below 0°C (32°F). Derating occurs above 45°C (113°F). For HVR model, operating temperature range only applies if using included climate controls. See Sol-Ark technical sales for planning outdoor sites.

5. Battery will operate at a maximum of 1C charge/discharge up to 2000m, above 2000m maximum output is derated to 0.8C, contact Sol-Ark for details.

6. Storage temperature of the battery with no charge or discharge.

7. EOL (End of Life) 70% retained capacity. See L3 Series warranty document for details.