L3 BESS: Outdoor

Modular Solutions

Stack up to 10 inverters

60 battery cabinets for 600kWac

3.6MWh

Efficient and Flexible

Increase business uptime and reliability with industry leading backup power.

Reduce utility demand charges with integrated peak shaving control.

Sell excess energy back to the grid or participate in DER programs.

Scalable and Cost Effective

Maximize ROI with industry-leading cost per kWh.

Reduce wiring costs and integrate electric vehicle charging stations using the GEN port.

Combine renewable energy sources.

Innovative

Integrated controls, 200A transfer relays, AC and DC coupling.

Reduce installation costs with built-in module and cabinet fire suppression.

Integrated 4-channel MPPTs allow maximum charging efficiency.

DATASHEET

L3 HVR

SKU: **L3-HVR-60KWH**

60K-3P-480V Inverter 30K-3P-208V Inverter

System Data		
Compatible Inverter Model	Sol-Ark 60K-3P-480V	Sol-Ark 30K-3P-208V
Cell Chemistry	Lithium Iron Phosphate	Lithium Iron Phosphate
Nameplate Energy Capacity (DC)	61.44 kWh	61.44 kWh
Usable Energy Capacity (DC) 1	55.30 kWh	55.30 kWh
Built-In DC Disconnect Rating	200A	200A
Internal Fuse Rating	160A	160A
Max. # Battery Units Per Inverter	6	6
Max. # Inverters in Parallel	6	6
Recommend Depth of Discharge	90%	90%
Roundtrip Efficiency Charge/Discharge (DC)	94% (25C, 0.5C)	94% (25C, 0.5C)
System Nominal Voltage (DC)	614.4V	307V
System Operating Voltage (DC)	588V-672V	294V – 336V
Battery Pack Internal Configuration	12s1p	6s2p
Charge/Discharge Current (DC): [2]		
- Recommended	100A	100A
- Max. Continuous	100A	100A
- Peak Discharge (60 sec @ 25°C)	125A	125A
Battery Max. Continuous Charge/Discharge Power (DC)	61.44kW	61.44kW
ESS Max. Cont. Charge/Discharge Power (AC)	60kW	30K
Fault Current Contribution per Battery	4,200A / 1.47ms	4,200A / 1.47ms
Mechanical Specifications		
Product Dimensions (WxDxH)	76x107x226 cm (30x42x89 in)	76x107x226 cm (30x42x89 in)
Net Weight	950 kg (2,095 lbs)	950 kg (2,095 lbs)
Mounting Type	Outdoor Enclosure	Outdoor Enclosure
Material and Finish	Steel – Corrosion Resistant Powder Coat	Steel – Corrosion Resistant Powder Coat
Operating Temperature[3] and Humidity	-20°C – 50°C (-4°F – 122°F) – 5%–85% RH	4°C – 43°C (40°F – 110°F) – 5%–85% RH
Operating Altitude [4]	3000m (9,843 ft)	3000m (9,843 ft)
Storage Conditions [5]	-4°F – 95°F – Up to 85% RH (non-condensing) and State of Charge (SOC) 30%	
Ingress Rating	IP55 (NEMA 3R)	IP55 (NEMA 3R)
Noise Level @ 1m	75 dBA at 30°C (86°F)	75 dBA at 30°C (86°F)
Seismic Mounting	Up to Category F	Up to Category F
Communication Ports	CAN2.0/RS485	CAN2.0/RS485
Battery Module Specifications		
Battery Module Nominal Energy Capacity	5.12kWh	
Battery Module Nominal Voltage & Capacity	51.2V / 100Ah	
Terminal Type	Amphenol SurLok – Push Lock Connector	
Warranty and Certification		
Performance Warranty [6]	10 years or 196MWh Throughput	10 years or 130MWh Throughput
Product Warranty	10 years	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. System usable energy may vary due to system configuration parameters.
2. Output current is affected by battery temperature and SOC.
3. Temperature is based on average cell temperature measured by the BMS. Charging is disabled below 0°C (32°F). Derating occurs above 45°C (113°F). Contact Sol-Ark for Technical Sales for outdoor sites.
4. Battery will operate at a maximum 1C charge/discharge up to 2000m, above 2000m maximum output is derated to 0.8C, contact Sol-Ark for details.
5. Storage temperature of the battery with no charge or discharge
6. EOL (End of Life) 70% retained capacity. See L3 Series warranty document for details.

Sol-Ark has a policy of continuous improvement and reserves the right to modify its specifications at any time and without prior notice. See sol-ark.com for the latest information.