

# 480V Outdoor and Indoor

## Battery Energy Storage System

**Battery Model:**
**L3 HVR-60**  
**L3-HVR-60KWH**
**L3 HV-60**  
**L3-HV-60KWH**
**SKU:**

System Data		
Compatible Inverter	Sol-Ark 60K-3P-480V-N	
Environmental Rating	Outdoor	Indoor
Cell Chemistry	Lithium Iron Phosphate	
Battery Cabinet Capacity	61.44 kWh	
System Usable Energy <sup>1</sup>	55.30 kWh	
Built-In DC Disconnect Rating	200A	
Internal Fuse Rating	160A	
Real Power (backup) Per Inverter	60 kWac	
Max DC-Coupled Solar Per Inverter	78 kWac	
Max AC-Coupled Solar Per Inverter	125 kWac	
Max Battery Cabinets Per Inverter	6	16
Maximum Inverters Per System	6 <sup>2</sup>	10
Recommend Depth of Discharge	90%	
System Nominal Voltage	614.4V	
System Operating Voltage	588V-672V	
Charge/Discharge Current <sup>3</sup>		
• Recommend	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)	58x58x218 cm (23x23x86 in)
Net Weight	950 kg (2,095 lbs)	773 kg (1,705lbs)
Mounting Type	Outdoor Enclosure	Freestanding Rack Mount
Operating Temperature <sup>4</sup>	-10°C – 50°C (14°F – 122°F)	4°C – 43°C (40°F – 110°F)
Humidity	5%–85% RH	
Operating Altitude <sup>5</sup>	3000m (9,843 ft)	
Storage Conditions <sup>6</sup>	-4°F – 95°F Up to 85% RH (non-condensing) State of Charge (SOC) 30%	
Ingress Rating	IP55 (NEMA 3R)	IP20 (NEMA 1)
Noise Level @ 1m	75 dBA at 30°C (86°F)	< 40 dBA at 30°C (86°F)
Seismic Zone	4	
Communication Ports	CAN2.0/RS485	
Battery Module Specifications		
Battery Module Configuration	12s1p	12s1p
Battery Module Energy	5.12kWh	
Battery Module Nominal Voltage	51.2V	
Battery Module Nominal Capacity	100Ah	
Warranty and Certification		
Performance Warranty <sup>7</sup>	10 years or 196MWh 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. System usable 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.