

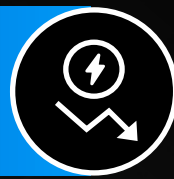


# Sol-Ark Commercial Energy Solutions

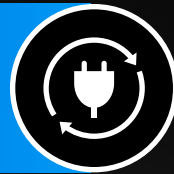


# Unlocking the Full Energy Value for Commercial

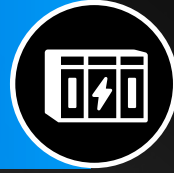
Reduce Electricity Demand Charges



Improve Energy Resilience Both Behind and in Front of the Meter



Leverage Storage as a Competitive Advantage



Optimize Energy Use



Gain New Revenue by Selling Excess Energy Back to the Local Utility



## Rooftop

Unique, oversized AC-coupling solution perfect for adding batteries to large solar arrays without changing rooftop strategy



## Ground Mount

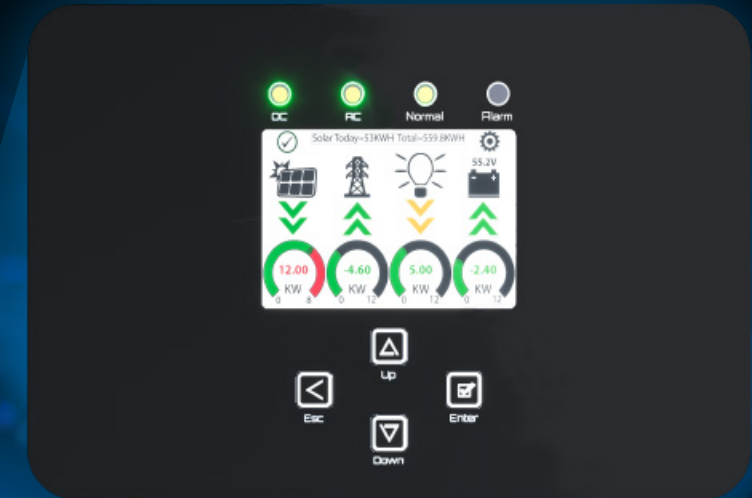
Rugged and space efficient outdoor ratings to accommodate a wide variety of project environments with or without batteries



## Carports, EV Charging Stations, Mechatron EV Carports

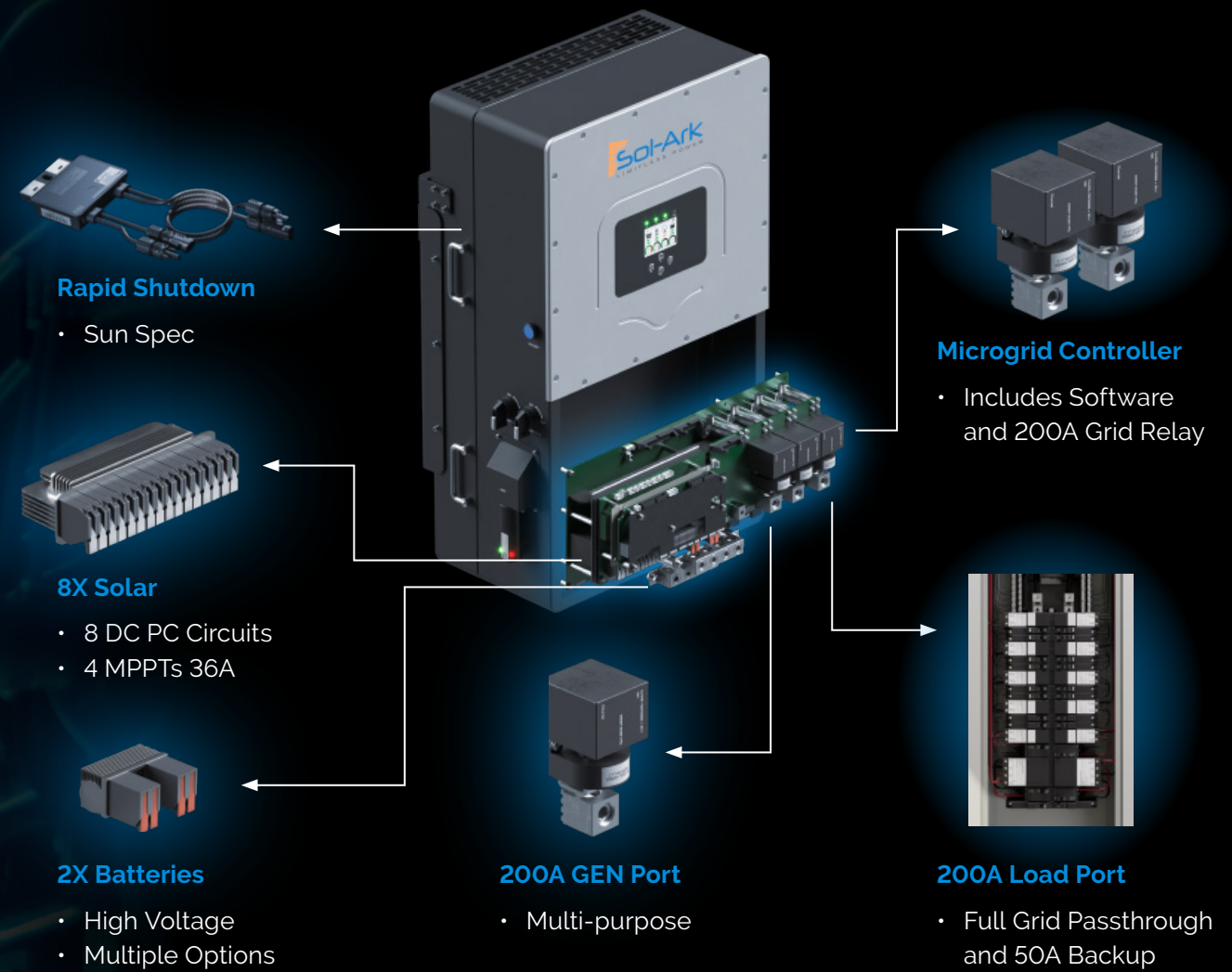
Large DC-coupled solar input allows for use with solar carports in EV charging applications

# Seamless UPS Modular Architecture NEM3 and VPP Ready



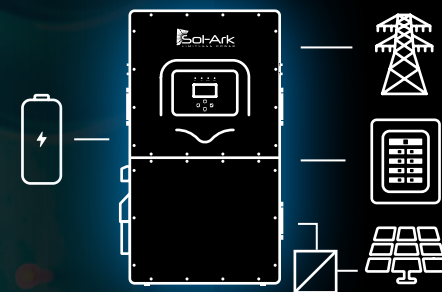
# Flexible Hardware for Every Job Site

Whether it's new construction, solar retrofit, site expansion, electric vehicles, or batteries only, Sol-Ark provides hardware solutions for your entire fleet.



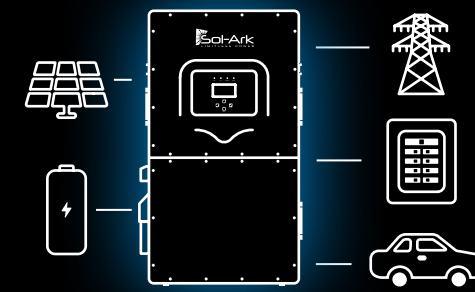
## AC Coupling

Easily retrofit very large solar arrays and add batteries with no change to existing solar strategy.



## DC Coupling

Connect solar directly, using the GEN port for EV charging or gas generator controls.



## Battery Only

Target electric bill savings, provide short duration backup, and expand site capability.



# Driving Commercial Energy Resilience

## Commercial Hybrid Inverters

Sol-Ark revolutionary commercial hybrid inverters simplify adding storage to commercial buildings. The Sol-Ark 30K provides native 208V three-phase electricity out-of-box, and the Sol-Ark 60K is 480V. Both include a microgrid controller, allowing savings to be optimized when grid connected and automatically isolated during power outages.

Both the 30K and 60K are stackable to 10 units of high voltage battery bank options, increasing project size and site flexibility. A multi-use port provides flexible interconnect to a variety of devices, including AC coupling, EV chargers, generator, or outdoor service panels.

Commercial & Industrial	
Product Suite	30K-3P-208V, 60K-3P-480V
Max PV Power to Battery	30,000W (30K) – 60,000W (60K)
CEC Efficiency	96%
Standard Warranty	10 Years



# Limitless Lithium™

Battery Energy Storage System

IP55 Outdoor, L3 HVR-60, Compatible with 30k and 60k Inverters



## Features/Innovations



Fully integrated energy storage solution – hybrid Inverter, battery and fleet management



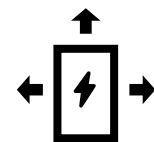
Built-in dual fire suppression including cabinet and packs



Integrated air conditioner for temperature control



Intelligent EMS, BMS and hybrid inverter technology



Supports up to 6 battery cabinets per Inverter



10-Year Warranty

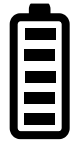
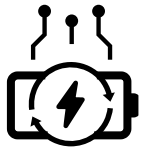

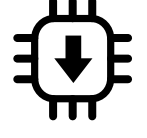
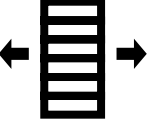





# Limitless Lithium™

Battery Energy Storage System  
IP20 Indoor, L3 HV-40 and L3 HV-60

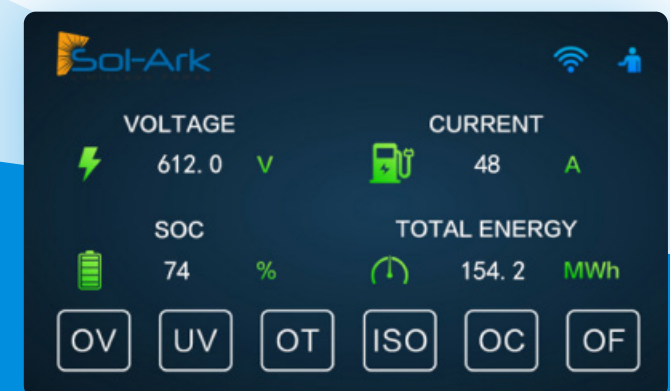


## Features/Innovations

-  Prismatic cells offer maximum reliability, efficiency, and safety
-  Automatic configuration of batteries and BMS for quick commissioning
-  5kW packs include built-in fire suppression
-  Supports USB and wifi updates including remote settings adjustment
-  Modular battery cabinets can be connected easily in parallel to increase capacity
-  10-Year Warranty
-  Preassembled IP55 outdoor option includes temperature control
-  Indoor IP20 option for maximum affordability



Inside of the battery

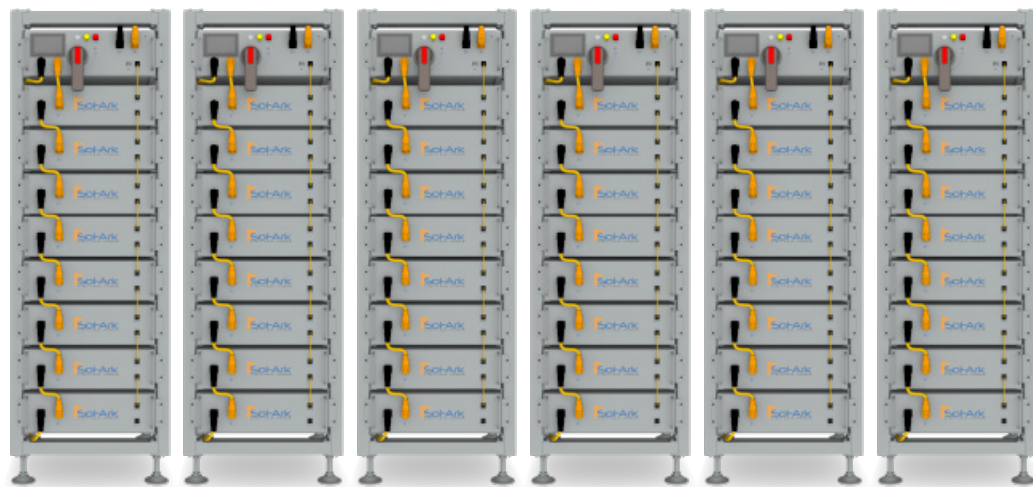


BMS touch screen offers real-time intelligent monitoring and diagnostics

# Modular Outdoor and Indoor Solutions



**IP55 Outdoor:** Up to 6 inverters / 36 battery cabinets  
**30k:** 180kWac / 2.2MWh / 234kWdc – 346kWac PV  
**60k:** 360kWac / 2.2MWh / 468kWdc – 720kWac PV



**IP20 Indoor:** Up to 10 inverters / 160 battery cabinets  
**30k:** 300kWac / 6.4MWh / 390kWdc – 576kWac PV  
**60k:** 600kWac / 9.6MWh / 780kWdc – 1.2MWac PV





## Technical Specifications: 208V Outdoor and Indoor

Battery Model Name:	L3 HVR-60	L3 HV-40
ESS Model Name:	L3 HVR-60KWH-30K	L3 HV-40KWH-30K
Sol-Ark Product SKU:	L3-HVR-60KWH	L3-HV-40KWH
<b>System Data</b>		
Compatible Inverter Model	Sol-Ark 30K-3P-208V	
Cell Chemistry	Lithium Iron Phosphate	
Nameplate Energy Capacity (DC)	61.44 kWh	40.96 kWh
Usable Energy Capacity (DC) <sup>1</sup>	55.30 kWh	36.86 kWh
Built-In DC Disconnect Rating	200A	
Internal Fuse Rating	160A	
Max. # Battery Units Per Inverter	6	16
Max. # Inverters in Parallel	6	10
Recommend Depth of Discharge	90%	
Roundtrip Efficiency Charge/Discharge (DC)	94% (25C, 0.5C)	
System Nominal Voltage (DC)	307V	410V
System Operating Voltage (DC)	294V — 336V	392V — 448V
Battery Pack Internal Configuration	6s2p	8s1p
Charge/Discharge Current (DC) <sup>2</sup>		
• Recommend	100A	50A
• Max. Continuous		100A
• Peak Discharge (60 sec @ 25°C)		125A
Battery Max. Continuous Charge/Discharge Power (DC)	61.44kW	40.96kW
ESS Max. Continuous Charge/Discharge Power (AC)	30kW	30kW
Fault Current Contribution per Battery	4,200A / 1.47ms	
<b>Mechanical Specifications</b>		
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
Material and Finish	Steel — Corrosion Resistant Powder Coat	Steel — Powder Coated
Operating Temperature <sup>3</sup> and Humidity	-20°C — 50°C (14°F — 122°F) — 5%—85% RH	4°C — 43°C (40°F — 110°F) — 5%—85% RH
Operating Altitude <sup>4</sup>	3000m (9,843 ft)	
Storage Conditions <sup>5</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	Up to Category F	
Communication Ports	CAN2.0/RS485	
<b>Battery Module Specifications</b>		
Battery Module Nominal Energy Capacity	5.12 kWh	
Battery Module Nominal Voltage and Capacity	51.2V / 100Ah	
Terminal Type	Amphenol SurLok – Push Lock Connector	
<b>Warranty and Certification</b>		
Performance Warranty <sup>6</sup>	10 years or 196MWh Throughput	10 years or 130MWh Throughput
Product Warranty	10 Years	
Certification	UL1973, UL9540, UL9540a, UN38.3, FCC, Prop 65	

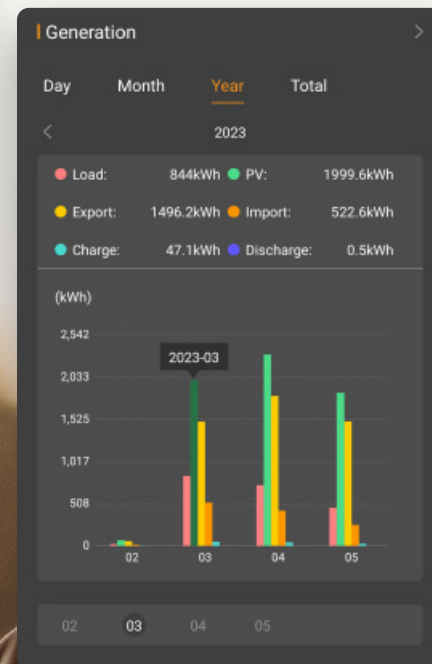
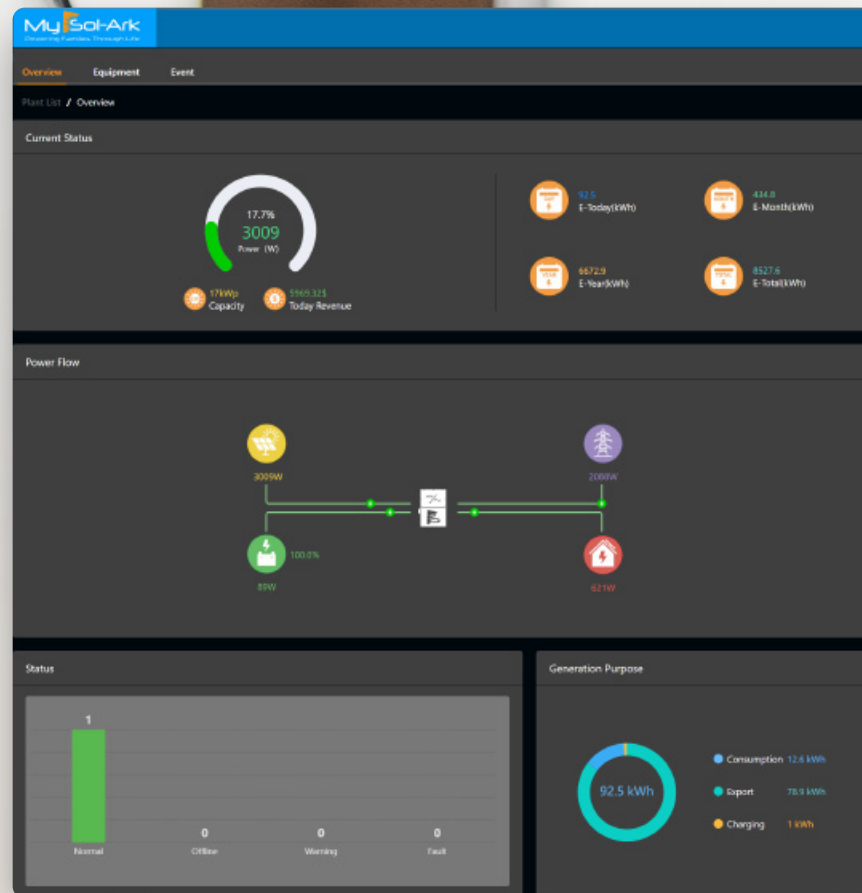
- DC usable energy, test conditions: 90% DOD, 0.3C charge and discharge at 25°C. System usable energy may vary due to system configuration parameters.
- Output current is affected by battery temperature and SOC.
- Temperature is based on the average cell temperature as measured by the BMS. Charging is disabled below 0°C (32°F). Derating occurs above 45°C (113°F). See Sol-Ark technical sales for outdoor sites.
- 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.
- Storage temperature of the battery with no charge or discharge.
- EOL (End of Life) 70% retained capacity. See L3 Series warranty document for details.

## Technical Specifications: 480V Outdoor and Indoor

Battery Model Name:	L3 HVR-60	L3 HV-60
ESS Model Name:	L3 HVR-60KWH-60K	L3 HV-60KWH-60K
Sol-Ark Product SKU:	L3-HVR-60KWH	L3-HV-60KWH
<b>System Data</b>		
Compatible Inverter Model	Sol-Ark 60K-3P-480V	
Cell Chemistry	Lithium Iron Phosphate	
Nameplate Energy Capacity (DC)	61.44 kWh	
Usable Energy Capacity (DC) <sup>1</sup>	55.30 kWh	
Built-In DC Disconnect Rating	200A	
Internal Fuse Rating	160A	
Max. # Battery Units Per Inverter	6	16
Max. # Inverters in Parallel	6	10
Recommend Depth of Discharge	90%	
Roundtrip Efficiency Charge/Discharge (DC)	94% (25C, 0.5C)	
System Nominal Voltage (DC)	614.4V	
System Operating Voltage (DC)	588V—672V	
Battery Pack Internal Configuration	12s1p	12s1p
Charge/Discharge Current (DC) <sup>2</sup>		
• Recommend	50A	
• Max. Continuous	100A	
• Peak Discharge (60 sec @ 25°C)	125A	
Battery Max. Continuous Charge/Discharge Power (DC)	61.44kW	
ESS Max. Continuous Charge/Discharge Power (AC)	60kW	
Fault Current Contribution per Battery	4,200A / 1.47ms	
<b>Mechanical Specifications</b>		
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
Material and Finish	Steel — Corrosion Resistant Powder Coat	Steel — Powder Coated
Operating Temperature <sup>3</sup> and Humidity	-20°C — 50°C (14°F — 122°F) — 5%—85% RH	4°C — 43°C (40°F — 110°F) — 5%—85% RH
Operating Altitude <sup>4</sup>	3000m (9,843 ft)	
Storage Conditions <sup>5</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	Up to Category F	
Communication Port	CAN2.0/RS485	
<b>Battery Module Specifications</b>		
Battery Module Nominal Energy Capacity	5.12 kWh	
Battery Module Nominal Voltage and Capacity	51.2V / 100Ah	
Terminal Type	Amphenol SurLok – Push Lock Connector	
<b>Warranty and Certification</b>		
Performance Warranty <sup>6</sup>	10 years or 196MWh Throughput	
Product Warranty	10 Years	
Certification	UL1973, UL9540, UL9540a, UN38.3, FCC, Prop 65	

- 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.
- Output current is affected by battery temperature and SOC.
- Temperature is based on the average cell temperature as measured by the BMS. Charging is disabled below 0°C (32°F). Derating occurs above 45°C (113°F). See Sol-Ark technical sales for outdoor sites.
- 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.
- Storage temperature of the battery with no charge or discharge.
- EOL (End of Life) 70% retained capacity. See L3 Series warranty document for details.

# Monitor and Manage Your Energy from Anywhere



- Maximize energy performance of every circuit with smart load management
- Automate business backup
- Optimize demand response with Peak Shaving
- Analyze how much energy was made, used, stored and sold back to the grid
- Check the health of the battery
- Remote commissioning and settings adjustment



# Future Proof. Battery Technology for Today and Tomorrow.

Battery technology is constantly evolving. Sol-Ark's industry leading software architecture enables pairing the best battery for the solution — today and in the future.

A Selection of  
Our Industry Leading  
Battery Partners



# Our Industry Solutions



Data Center



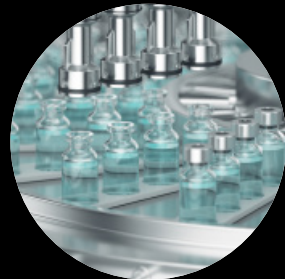
Telecommunications



Oil & Gas



Military



Pharmaceutical



Industrial Automation



Big Box Retail



Financial Institutions



Pharmacies



Gas Stations



Restaurants



Education



Agriculture



Disaster Relief



Wineries



# We're innovators...

who solve the most critical energy storage challenges every day

# About Sol-Ark

A global energy technology leader

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

The logo for the EY Entrepreneur of the Year award, featuring a stylized 'EY' monogram and the text 'EY ENTREPRENEUR OF THE YEAR'.

Tom Brennan, CEO and CTO of Sol-Ark, is a 2023 winner of the E&Y Entrepreneur of the Year<sup>®</sup>, the world's most prestigious business award for entrepreneurs

