

GENESIS SENTINEL POWER PACK SERIES

Portable Power Solutions

BlackStarTech's Genesis Sentinel Power Pack Series delivers lightweight, portable power delivery solutions which can be rapidly deployed in a variety of applications where effective power was not thought to be available. These power packs run off Lithium Iron Phosphate (LiFePO₄) batteries and are ideal for supplying reliable backup power in both emergency situations and maintenance application scenarios.

These dependable battery backup mobile power packs can be used in a variety of applications to support critical operations, emergency response, and power for routine maintenance and testing work. The Sentinel Power Packs can be configured to provide 120VAC, 12/24/48VDC, or even a specialty 120VAC/125VDC Unit. There are options of supplying 3-Phase 480VAC/600VAC power allowing the operation of motor-operated valves or other critical loads via a small 24V portable battery power supply. Finally, a battery AOV Power Pack configuration exists that can manipulate air-operated valves at your facility without the need to carry heavy compressed air bottles.

The Sentinel Power Packs are designed to act as an uninterruptible power supply (UPS) while delivering the various power solutions to ensure power availability redundancy and capability while ensuring productivity during planned or unplanned power interruptions to energize your electrical tools or equipment to help reduce downtime or delays.

In case of an unplanned loss of power, your team can rely on BlackStarTech's Sentinel Power Pack Series as they are highly reliable, lightweight and can provide targeted power when needed.

The Sentinel Power Pack Series is designed to deploy power in less than 30 minutes, quickly and efficiently. These units are ideal for field technicians, facility safety testing, emergency services, first responders and more.

Applications

Nuclear Power
Generation Facilities

Utilities

Telecommunications

Schools, Universities and
Research Facilities

Medical and Healthcare

Industrial and Chemical
Processing Facilities

Law Enforcement

Fire Protection and Security

Military Services

Government
Emergency Management

BlackStarTech Genesis Sentinel Power Pack Series Vs. Backup Power Packs from Competitors

BlackStarTech	Typical Competitor Product
Utilizes Lithium Iron Phosphate (LiFePO ₄) batteries	Utilizes lead acid batteries, nicad batteries, lead calcium, or nickel batteries
Battery management system features take action to protect the health of the batteries	Requires frequent routine maintenance for the batteries
15-year expected battery lifespan	Frequent replacement of batteries, 4-8-year battery lifespan
15,000 rechargeable battery cycles	4,000 rechargeable battery cycles

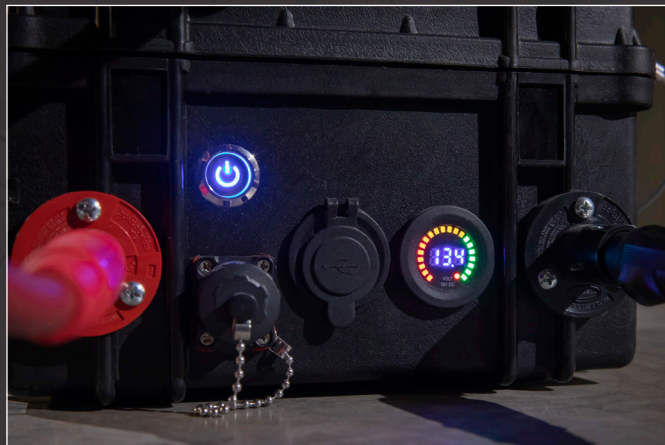
BlackStarTech's Genesis Sentinel Power Pack Series provides portable, compact, lightweight power for remote situations including emergencies, offsite testing, and electrical grid failure events

This unique set of technology features puts the Genesis Sentinel Power Pack Series above the competition by eliminating down time during a power outage, enhancing productivity and enabling equipment maintenance that result in improved schedule and operating margins.

LiFePO₄ Batteries: Superior and Safer Than Your Existing Battery

The Genesis family of products uses LiFePO₄ batteries, which are safe, reliable and more environmentally friendly than lead acid batteries. The internal battery management system (BMS) monitors battery health including cell voltage, maximum charge and discharge current, overvoltage, overcurrent, temperature, cell balancing, short circuit and more. The BMS takes protective actions to improve reliability and safety using notification alarms or by automatically disconnecting the battery.

The chemical make-up allows the battery to maintain an expected lifespan of 15 years, which is significantly longer than every 3 to 5 years for lead acid. This means fewer battery replacements, less downtime and increased reliability. Genesis also offers an optional battery health diagnosis report to measure battery life eliminating requirements to conduct battery surveillance testing.



Supporting Critical and Maintenance Applications

The Sentinel Power Pack Series provide a wide range of solutions from routine maintenance work to emergency response scenarios. Utilizing these mobile backup power packs on the job yield productivity savings and minimize financial costs from power interruptions and quickly restore your equipment even in remote situations, no matter day or night.

First Responders

When large scale traffic events, fires, floods, earthquakes, tornadoes and hurricanes occur, the first people on-site to assist victims may not be able to access power. BlackStarTech's Sentinel Power Pack Series gives first responders access to remote power when setting up makeshift triage sites for giving first aid treatment to victims.



Emergency Services

When responding to events in remote areas, EMTs, ambulance companies, firefighters and law enforcement may need to set up a command center for dealing with hostage situations, fires, floods and more. BlackStarTech's mobile power packs can provide immediate power for equipment operation, lighting units and communications.



Field Tech

When surveying, planning and building remote sites for cell phone towers, wind farm stations and industrial facilities, BlackStarTech's Sentinel Power Pack Series supply field technicians with the necessary power for running equipment, operating large tools, and testing electronic gear.



Safety Testing

BlackStarTech's mobile power packs are ideal backup power units for remote testing. In order to test equipment in manufacturing, packaging, and production facilities, often times the main power must be disabled. When this occurs, these portable units allow testing personnel to operate equipment and other tools.



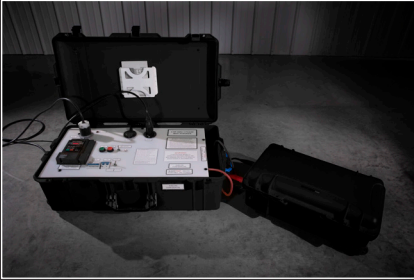
The Genesis Sentinel Power Pack Series is Ideal for Providing Portable Power During These Events:

Power outages
Infrastructure failures
Earthquakes

Grid maintenance
Emergencies
Extreme temperature scenarios

Remote testing
Transit accidents
Hurricanes and tornadoes

Reliable Portable Power You Can Count On Genesis Sentinel Power Pack Series



Sentinel MOV Power Pack (480 VAC)

Model # MOV-Power-Pack-480

The Sentinel MOV Power Pack is a small suitcase-sized three-phase power solution. Compact and lightweight, it is ideal for deployment at facilities using motor operated valves such as refineries, water treatment plants, nuclear stations, and other various industrial facilities. This power supply allows the user to manipulate motor operated valves, as it can be used to open/close/throttle the valve or test the valve. The unit has capacity to perform 60 to 100 valve strokes per battery charge, depending on size of valve. The battery can recharge within two hours.



Sentinel AOV Power Pack

Model # AOV-Power-Pack

During extended loss of AC power, the Sentinel AOV Power Pack can be used to run air operated valves in facilities such as chemical plants, power plants, nuclear stations, and marine terminals. The unit is about as big as a suitcase and has capacity to perform 50 to 100 valve strokes per battery charge, depending on size of valve. The battery can recharge within two hours.



Sentinel Portable Power Pack (120VAC/125VDC)

Model # Porta-Power-Pack

When AC power has been interrupted, the Sentinel Portable Power Pack provides a flexible solution to deliver 120VAC/125VDC. The product can run off the included 24V-100Ahr battery or a 110VAC source when available. The Portable Power Pack acts as an UPS. When 110VAC is restored, the battery will charge while the Portable Power Pack powers its load.



Sentinel Tactical Rapid Deployment Pack

Model # Sentinel-RDK

Sentinel Tactical Rapid Deployment Packs are portable, lightweight units complete with an ergonomic backpack for carrying into remote locations for emergency events which take place in rugged terrain. This power pack provides up to 125VDC power and can power DC components.



Reliable Portable Power You Can Count On Genesis Sentinel Power Pack Series



Sentinel Mobile Power Pack

Model # Sentinel-Mobile-Pack

The Sentinel Mobile Power Pack (1.5 kW-h) is a handheld portable power solution for a wide range of outage events. This lightweight, compact unit can be deployed by first responders, field testing personnel and repair technicians.



Sentinel Mobile Power Pack Extreme

Model # Sentinel-Mobile-Pack-EXT

The Sentinel Mobile Power Pack Extreme (2 kW-h) delivers high output emergency power in a portable, rugged case with a built-in retractable handle and wheels for easy and convenient transport to and throughout your job site.



Sentinel Quantum Power Pack

Model # Sentinel-Quantum-Pack

The Sentinel Quantum Power Pack (3 kW-h) supplies lightweight, highly portable backup power during events which occur in remote areas, across rugged terrain or during extreme weather.

Under development.



Specifications for Sentinel MOV and AOV Power Packs

		Sentinel MOV Power Pack (480 VAC)	Sentinel AOV Power Pack
Model #		Model # MOV-Power-Pack-480	Model # AOV-Power-Pack
Battery			
	Type	Lithium Iron Phosphate (LiFePO ₄)	
	Weight	65 lbs	65 lbs
	Dimensions (W x H x D)	22" x 14" x 9"	22" x 14" x 9"
	Normal Voltage	25.6	25.6
	Typical Capacity (Ah)	100	100
	Standard Charge Voltage (V)	28.8±0.2	28.8±0.2
	Maximum Charge Current (A)	50	50
	Maximum Discharge Current (A)	120	120
	Over-Current Protection(A)	15	15
	Working Temperature Range of Charge (°C)	- 18 ~ 53	- 18 ~ 53
	Working Temperature Range of Discharge (°C)	-20 ~ 60	-20 ~ 60
	Charging Time	2 hrs	2 hrs
Case			
	Color	Black	
	Dimensions (W x H x D)	32" x 10.5" x 19"	36" x 16" x 18"
	Weight	70 lbs	75 lbs
Capacity			
		Capacity to perform 60 to 100 valve strokes per battery charge, depending on size of valve	Capacity to perform 50 to 100 valve strokes per battery charge, depending on size of valve
Warranty			
		1 Year Manufacturer's Warranty	

For more information on standard or customized products,
contact us at 1-844-585-6439 and info@blackstartech.com.

Specifications for Rapid Tactical Deployment Kit and Mobile Power Packs

		Sentinel Portable Power Pack (120VAC/125VDC)	Sentinel Tactical Rapid Deployment Pack	Sentinel Mobile Power Pack	Sentinel Mobile Power Pack Extreme	Sentinel Quantum Mobile Power Pack
Model #		Porta-Power-Pack	Sentinel-RDK	Sentinel-Mobile-Pack	Sentinel-Mobile-Pack-EXT	Sentinel-Quantum-Pack
Contents						
		RBP 2500w 120VAC Inverter	Aims 1500w UL 120VAC Inverter			
		EXCELSYS 125VDC/1200W External Power Supply	EXCELSYS 125VDC/1200W External Power Supply			
		AC/DC output cable kits	AC/DC output cable kits with Dual BKR Wye			
		One 50’ L5-20 12awg generator/AC input cable	One 25’ 5-15 12awg Lighted extension cord			
			One 50W LED AC flood light			
			Output Lead Tie-in kit			
			Tool kit, Crimp kit			
			VOM			
			OLED headlamp			
Backpack						
	Dimensions (W x H x D)	22" x 17" x 23"	4" x 19" x 12"			
	Weight	92 lbs	78 lbs (backpack = 35 lbs battery = 43 lbs)	35 lbs	23 lbs	48 lbs
Mobile Power Packs						
	Inverter Rating	2500 W	N/A	1000 W	1500 W	2500 W

Continued on next page.

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Specifications for Rapid Tactical Deployment Kit and Mobile Power Packs (continued)

		Sentinel Portable Power Pack (120VAC/125VDC)	Sentinel Portable Power Pack (120VAC/125VDC)	Sentinel Mobile Power Pack	Sentinel Mobile Power Pack Extreme	Sentinel Quantum Mobile Power Pack
Battery						
	Type	Lithium Iron Phosphate (LiFePO ₄)				
	Weight	65 lbs	43 lbs	23 lbs	43 lbs	83 lbs
	Dimensions (W x H x D)	22" x 14" x 9"	11" x 14.75" x 6"	16" x 7" x 10"	14" x 9" x 19"	22" x 10" x 15"
	Normal Voltage	25.6	12.8	25.6		
	Typical Capacity (Ah)	100	100	25	50	80
	Standard Charge Voltage (V)	28.8±0.2	14.4±0.15	28.8±0.15		
	Maximum Charge Current(A)	50		25	50	
	Maximum Discharge Current(A)	120	100	50		100
	Working Temperature Range of Charge (°C)	-18 ~ 53	-0 ~ 45			
	Working Temperature Range of Discharge (°C)	-20 ~ 60				
	Charging Time	2 hrs				
	Cycle Life	3000 charge cycles <20% total capacity reduction				
Warranty						
		1 Year Manufacturer's Warranty				

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