



GENESIS Defender Series Generators

Resilient Long Term Power Solutions

The Genesis Defender Series Generators are custom compact dual fuel generators specifically configured to connect and support a variety of BlackStarTech battery backup power systems. This configuration allows BlackStarTech's backup power systems, such as the Genesis Power Cart Series, the ability to provide long term power for 30 days or more. The Defender Series complements BlackStarTech's rapidly deployable power systems by delivering reliable backup power and serving as an uninterruptible power supply (UPS).

The Defender Series Generators run on dual fuel propane and gas. The generators are configured by BlackStarTech with two propane cylinders that auto swap between cylinders through an installed regulator. This allows the 3.5kW generator to run for up to 16 hours of operation on two 20-lb propane cylinders or 9 hours on a 3.4-gallon tank of gasoline. Utilizing the 9.5kW generator allows you to run up to 10.66 hours on two 20-lb propane cylinders or 12 hours on 6.6-gallon tank of gasoline. Apply economy mode for quieter operation on the 3.5kW generator, providing more fuel savings, and longer engine life. Each unit has a front control panel that provides easy access to outlets, main breaker, voltage output frequency meter, USB ports, and more. This compact, portable generator is air cooled and has low oil shut-off, electric and recoil start, and a cast iron sleeve for durability.

Whether you need to support crucial equipment during the loss of AC power or need to perform maintenance, the Genesis Defender Series acts as a reliable defense against loss of power by supplying power to vital components.

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

The Defender Series Generator Augments BlackStarTech's Backup Power Systems resulting in an Uninterruptible Power Supply

BlackStarTech's Genesis Power Cart Series coupled with integrated Defender Series Generators serve as an uninterruptible power supply (UPS) that can run for 30 days or more. The Defender complements the Lithium Iron Phosphate (LiFePO₄) batteries that are utilized across the BlackStarTech product line, delivering paramount portable power.

The combined battery from the Power Cart Series and Defender Series Generator provides a means to initially deploy the battery energy system and carry critical loads while the generator can be configured later to supply the loads indefinitely. The battery system is optimized with the support from the Defender Series Generator, as it's designed to carry the supplied load while simultaneously recharging the batteries. If the generators or any line AC source is removed, the Genesis power system batteries automatically swap into use to carry the electrical load without interruption. The whole system becomes a default UPS to maintain your critical and essential electrical loads.

Propane-Powered Defender Generator Series vs. Diesel Generators from Competitors

Propane	Diesel
Ease of portability and refueling	Higher fluctuating costs
Clean-burning fuel with low emissions and carbon footprint	Higher emission rate with more by-product emission
Effectively infinite shelf life with very low maintenance due to cleaner burn and not changing/sampling fuel	Requires regular maintenance to operate efficiently due to higher carbon/combustible deposits that taint engine and fuel change and sampling requirements
Eliminates environmental spill concerns and the requirement for a spill kit	Diesel Fuel requires deployment of environmental spill berm, monitoring and potential of reportability
Dual functionality fuel source - optional run-on gasoline providing diversity in long term response	Single fuel source minimizing resiliency solutions

Propane Generators: Less Maintenance and More Efficient

Maintenance is key in the propane versus diesel discussion. Diesel generators require regular maintenance and vigilant monitoring due to stagnant fuel remains in the tank, which results in water condensation that in turn accelerates microbiological growth. With diesel or gas, it must be sampled regularly for moisture, which runs the risk of ruining the generator. If needed the Defender Series Generators offers resilience and flexibility as it also accepts gasoline as an alternative fuel solution.

The Defender Series dual fuel generators utilize propane as the first choice due to diversity of fuel supply and the resiliency factors of propane. Propane has an effectively infinite shelf life, estimated at 30 to 40 years or more, and requires less maintenance. The utilization of propane mitigates many environmental concerns found with other fuel sources due to spilling and leaking, plus the emissions associated with diesel fuel. The propane-powered Defender Generator Series does not require rigorous maintenance and is an environmentally acceptable alternative that exudes less carbon. Propane is clean-burning fuel because of its low emissions as it produces fewer greenhouse gases per gallon than diesel so it can be used in large indoor ventilated areas such as a turbine building deck. Diesel engines are prohibited from certain areas because of the emissions, while propane generators do not have that limitation.

Resilient Long-Term Power Solutions

The Genesis Defender Series Generators can enable many diverse applications, from maintenance work to supporting critical infrastructure. It is reliable power you can depend on.

Emergency Applications

The Defender Generator Series has the ability to integrate with BlackStarTech's battery backup power supplies, resulting in a reliable UPS system. This propane-powered generator acts as a backup source to power components during a loss of power or support critical work areas when connected to BlackStarTech's power systems. These critical work areas could be a control room for a nuclear site, an ICU room for a hospital or a server room for telecommunication facility.



These generators can be staged far away or near the BlackStarTech Genesis Power Carts, as the connecting unit extends 150 ft. When the generator is integrated with the power cart, it has the capability to support long lasting power for up to 30 days or more. This uninterruptible power can help save lives, keep operations running and deliver critical power when you need it most.

Non-Emergency Applications

These generators when integrated with BlackStarTech's battery backup power systems, can support personnel during an outage or shutdown when maintenance work is being performed. It can power critical equipment for any industrial facility such as nuclear sites, utility sites, and manufacturing facilities. This backup power allows your team to work in parallel on certain projects, reducing work delays for testing equipment to ensure they are running properly after repairs.



For road construction, easily roll the Defender Series Generator and connect it to BlackStarTech's BrightSites Series lighting equipment to keep your equipment continually powered on the job.



Genesis Defender Generator Series

A suspension of power is inconvenient in any industry. Integrate the Defender Series Generators with any of BlackStarTech's Genesis Series emergency power systems, and you will have an uninterruptible power supply. UPS systems sense when the main power supply is disrupted and automatically kicks in so there is a continuous stream of electricity. Defender gives you reliable backup power to your backup power system.



Defender 3.5kW Generator (120VAC) #Defender-120

This dual fuel generator produces 3500 peak watts and 3200 running watts. It can last up to 16 hours on the two 20-lb propane cylinders or 9 hours on 3.4-gallon tank of gasoline. Each unit's control panel comes with an electric start switch, an economy switch to run quietly and efficiently, and a circuit breaker, while displaying output overload information. Also incorporated are various outlets including the following:

- 2 120V 30A (TT-30R)
- 2 120V 20A household outlets (5-20R)
- 1 12V DC automotive-style outlet with dual USB adapter



Defender 3.5kW Generator (120VAC/125VDC) #Defender-Dual

This dual fuel generator produces 1200 watts of 125VDC power and 3500 peak watts and 3200 running watts. It can last up to 16 hours on the two 20-lb propane cylinders or 9 hours on the 3.4-gallon tank of gasoline. Each unit's control panel comes with an electric start switch, an economy switch to run quietly and efficiently, and a circuit breaker, while displaying output overload information. Also incorporated are various outlets including the following:

- 2 120V 30A (TT-30R)
- 2 120V 20A household outlets (5-20R) equipped with automatic over-voltage protection
- 1 12V DC automotive-style outlet with dual USB adapter




Defender 9.5kW Generator (240VAC) #Defender-240

The Genesis 9.5kW dual generator produces up to 12,500 peak watts and 9,500 running watts. This generator can run up to 10.66 hours with the two 20-lb pound propane cylinders or 12 hours on 6.6-gallon tank of gasoline. This unit has a built-in control panel, providing easy access to the VTF data center meter which displays the voltage, frequency and time left on the generator. The control panel also provides the following outlets and buttons:

- 2 Duplex 120V 5-20R
- 1 120/240V L14-30R
- 1 120/240V 14-50R
- 2 USB ports
- ST switch outlet



Specifications

		Defender 3.5kW Generator (120VAC)	Defender 3.5kW Generator (120VAC/125VDC)	Defender 9.5kW Generator (240VAC)
		Model #Defender-120	Model #Defender-Dual	Model #Defender-240
Generator				
	Type	Dual Fuel		
	Weight	95.7 lbs		221 lbs
	Dimensions	25.1L x 17.3W x 18.3H in		31L x 21.5W x 23H in
	Wheels	Yes		
Wattage				
	Starting Watts	3500W		9500W
	Running Watts	3200W		12500W
Voltage				
		120		20/240V
Frequency				
		60Hz		60Hz
Outlets				
		120V 30A (TT-30R), 120V 20A Duplex (5-20R), 12V DC Automotive	120V 30A (TT-30R), 120V 20A Duplex (5-20R), 12V DC Automotive	2 Duplex 120V 5-20R 1 120/240V L14-30R 1 120/240V 14-50R 2 USB ports ST Switch
Noise Level				
		59.0 dBA		74.0 dBA
Warranty				
	 1 Year Manufacturer's Warranty			



For more information on standard or customized products,
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