



PowerGen Remote Power Series



Benefits

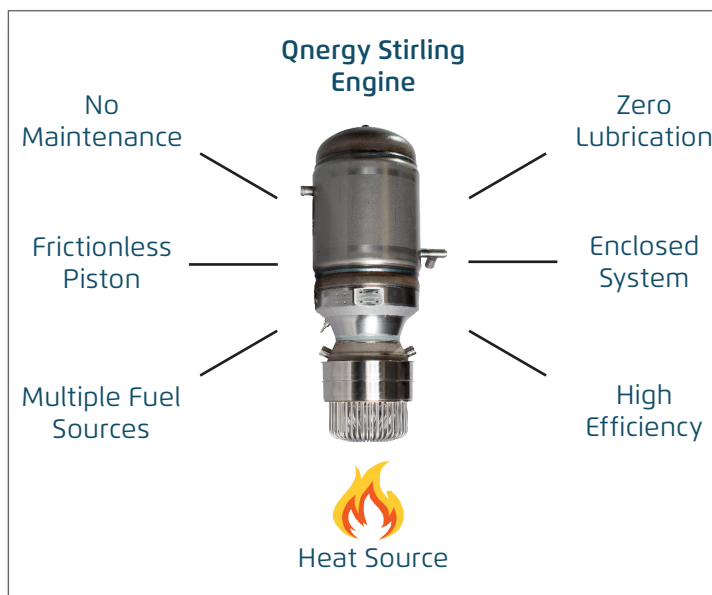
- Zero Maintenance Generator
- Environmentally Robust
- Multiple Fuel Sources
- Quick Installation
- Low Cost/kW
- Small Footprint
- Long Operating Life

PowerGen Series

Designed for rugged and remote operation, the PowerGen remote power generator provides reliable electrical power supply to the most demanding and mission-critical loads. Based on Qnergy's no-maintenance and highly reliable PCK series Stirling engines, the generator package can work seamlessly with a variety of fuel supplies, including: natural gas, propane, ethane, biogas, and multiple associated gas streams. By means of its flexible and modular design, this generator package can be tailored to provide a broad range of power output architectures to meet the electrical requirements of each specific site load.

Assembled using lean manufacturing processes, the PowerGen is built to meet strict quality standards. The integrated components and controls are all designed to maximize the customer's ability to control and monitor their power-generation asset while minimizing servicing of any kind.

What Makes Qnergy PowerGen Your Remote Power Solution?



Each PowerGen Remote Power Systems utilizes Qnergy's unique PCK80 Stirling Generator

Applications



- Power Backup
- Biogas to Electricity
- Telecommunication
- Enhanced Oil Recovery (EOR)

- Cathodic Protection
- SCADA
- Automation & Controls
- Remote Micro-Grid



Qnergy has an experienced design and integration team that works to meet customer specific power needs!

PowerGen Specification	5650 Series	1200 Series
Fuel Type	Gaseous Fuels: NG, LPG, Propane, Wellhead Gas	Natural Gas
Fuel Consumption (min / max)	1,433 / 3,964 ft ³ /day (NG) 15.2 / 44.4 gal/day (Propane)	672 / 936 ft ³ /day
Fuel Pressure Range	3-50 PSI (Natural Gas) 2-10 PSI (Propane)	3-50 PSI
Caloric Value (min / max)	751 / 3,382 BTU/ft ³	751 / 3,382 BTU/ft ³
Ambient Temperature Operation ¹ Ambient Temperature Rated (Startup)	-13°F to 122°F 5°F to 122°F	-13°F to 122°F 5°F to 122°F
Cabinet Electrical Rating	IP54	IP54
Maintenance ²	Engine (none); System (Semi-Annually)	Engine (none); System (Semi-Annually)
Certification	cETLus (UL2200) (CSA C22.2#100 / C22.2#14)	cETLus (UL2200) (CSA C22.2#100 / C22.2#14)
Emissions (NO _x @ 5% O ₂) Emissions (CO @ 5% O ₂)	30 PPM (66 mg/kWh) 9 PPM (12 mg/kWh)	30 PPM (66 mg/kWh) 45 PPM (60 mg/kWh)
Weight (Dry)	866 lbs (392 kg)	866 lbs (392 kg)

¹ Ask about a low temperature operation package (down to -40°F)

² Conditions and hours may require more frequent activity

Power Configuration Options to Meet Your Needs:

Series	Electrical Configuration	5650 Power Output*	1200 Power Output*
A	± HVDC (±332 to ±365)	5,650 Watts	1,200 Watts
B	120 VAC Sync	3,120 Watts	1,200 Watts
C	120 VAC / 240 VAC Split Phase	3,120 Watts	1,200 Watts
D	120 VAC / 240 VAC 2 Phase	Output A: 1,560 Watts Output B: 2,500Watts	1,200 Watts
E	240 VAC Sync	5,650 Watts	1,200 Watts
G	± HVDC / 120 VAC	Output A: 3,000 Watts Output B: 1,560 Watts	1,200 Watts
H	± HVDC / 240 VAC	Output A: 3,000 Watts Output B: 2,500 Watts	1,200 Watts

Low voltage DC (24 VDC / 48 VDC) require the use of the Qnergy Power Interface Package (PIP)

* For detailed performance data, please request the engineering specification document

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Qnergy is a company focused on providing energy to a world market looking for innovative, cost effective, and efficient ways to energize the future. With more than 40 years of expertise and proven reliability, Qnergy brings proprietary, high-performance Stirling engine technology to the marketplace for commercial, industrial, and residential applications.

How It Works

Qnergy's Free-Piston Stirling Engine (FPSE) generator can transform virtually any heat source into electricity. Once heat is applied to the FPSE the heat exchangers maintain a temperature differential across the engine causing the helium to shuttling back-and-forth inside the engine, expanding and contracting. The oscillating helium drives the linear reciprocating motion of the piston, which by means of an integral linear alternator, directly converts the reciprocating motion of the piston into electrical power.

The Qnergy engine has fewer moving parts than traditional kinematic Stirling engines, and no direct-contact points that cause wear and require lubrication. The Qnergy engine is truly a maintenance-free technology and offers long-life performance, two key features that make it an ideal power source.

PowerGen Base Dimensions (in/mm)

