

Remote Power



SmartGen

The Qnergy Remote Power generator combines the high efficiency Free Piston Stirling Engine (FPSE) technology with advanced combustion capabilities to efficiently transform various caloric value gas fuel into electricity. The external combustion engine and automatic control system enable the generator to produce steady, dependable power.

This gives the generator a tremendous advantage over more traditional systems serving remote power applications. This breakthrough engine design is hermetically sealed with no lubricants, seals or touching parts to maintain, giving our generators the rugged durability needed to power the most critical loads.

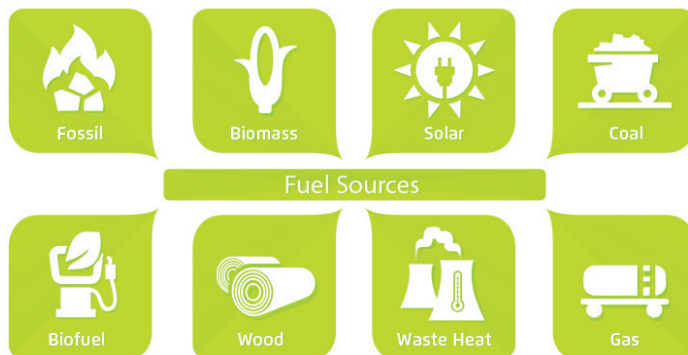


The Qnergy SmartGen Remote Power Generator



Key Features

- Continuous or intermittent power for remote applications
- Wide range caloric value gas fuel capability
- Ultra quiet operation
- No lubrication required
- Remote monitoring and control
- Battery charger capability
- Designed for 10 years of continuous power
- Hermetically sealed engine for zero maintenance



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.

Qnergy products include the advanced free piston designed QB series Stirling engine that is incorporated into products for space and water heating as well as remote power for Oil & Gas, Telecom, and other off-grid applications.

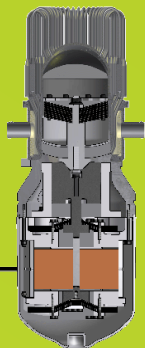
Qnergy has the ability to bring talent and technology together with its customers, suppliers, and investors to develop unique energy solutions for the 21st century. The company is headquartered in Ogden, Utah.

Technical Specifications

Generator Design Life	10 - 15 years	
Fuel Type	NG; LPG; Propane; Unprocessed Gas ¹	
Fuel Supply	NG, 3 - 50 psi ² Propane, 2 - 10 psi	
Fuel Consumption	Natural Gas Propane	105 m ³ /day 40 gal/day
Operating Temperature	5°F - 122°F (-15°C - +50°C) ³	
Altitude	5,000ft ⁴	
Output Voltage	24/48 VDC (120/240VAC) ⁵	
Max Continuous Power	4kW (24VDC) / 6kW (48VDC)	
Battery Size	245 - 20,000 Ahr	
Battery Type	AGM NiCd	
Voltage Regulation	-10% - +20%	
Maintenance Cycle	1 - 2 events per year ⁶	
Dimensions	Generator	69.3" x 57.1" x 27.8" 1760.2mm x 1450.3mm x 706.1mm
	Power Interface Package	35" x 55" x 12.8" 889mm x 1397mm x 325.1mm
Weight	Generator	680lbs (310kg)
	Power Interface Package	220lbs (100kg)
<p>1. Subject to well-based analysis 2. NG 2-10 PSI available upon request 3. Storage is allowed down to -13°F (-25°C) 4. Beyond 5,000ft power output will de-rate by 5% per 1,000ft 5. Custom load split 120/240VAC upon request 6. Minimal maintenance such as cleaning, adjustments or filter replacement</p>		

Heat In

How It Works



Electricity Out

Using a highly efficient thermodynamic process, Qnergy's free piston Stirling engine (FPSE) can create electricity from virtually any heat source. The heat input creates a temperature differential across the engine causing the helium inside the engine to expand and contract, which in turn drives the reciprocating motion of the piston. The FPSE directly converts the reciprocating motion of the piston into electrical power via the linear alternator inside the engine.

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

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 Renewable. Reliable. Resilient.