

# Qnergy

Powering Methane Abatement



## Product Catalog

# PowerGen

## Remote Power Series

The PowerGen delivers dependable 24/7 electricity using Qnergy's Free Piston Stirling Engine. This innovative technology enables users to operate efficiently with standard fuels like natural gas and propane, as well as renewable sources, such as biogas, landfill gas, and hydrogen.

### Advantages

- Maintenance Free Engine
  - No Moving Parts
  - No Oil Changes
- Reliable Prime Power Solution
- Low Cost of Ownership
- Clean Operation
  - Trace Amounts CO, NO<sub>x</sub>, SO<sub>x</sub>
  - No Methane Slip
- Multiple Gaseous Fuel Options
- Plug and Play Installation
- Small Footprint
- 60,000 BTU's Heat Energy Available

### Industries Served

Natural gas, waste management, agriculture, and telecommunications.



### Applications

- Methane Abatement
  - Pneumatic Devices
  - Vapor Recovery
  - Well Casing
- Cathodic Protection
- Landfill Gas
- Prime Power in the 1kW to 20kW Range
- Well Pad Automation
- Communication & SCADA
- Renewable Hybrid with Solar PV
- Off-Shore Power
- Glycol Heat Trace (GHT)

**99.99%  
Methane  
Destruction**

## PowerGen Base Model Operational Data

PowerGen Models	5650 Series	1800 Series
Power Output <sup>1</sup>	5,650 W	1,800 W
Fuel Type	Gaseous Fuels: Natural Gas, Propane, Hydrogen Blends	
Fuel Consumption (max)	3,964 ft <sup>3</sup> /day (NG) 44.4 gal/day (LPG)	1,300 ft <sup>3</sup> /day (NG) 10 gal/day (LPG)
Fuel Pressure Range	3-50 PSI (NG), 2-10 PSI (LPG)	
Caloric Value (min / max)	751/3,382 BTU/ft <sup>3</sup>	
Ambient Temp. Operation	-13 °F to 122°F (-40°F startup)	
Electrical Configuration <sup>2</sup>	120/240 VAC Split Phase	
Certification	Conforms to ANSI/CAN/UL/ULC STDs 6200 & 2200	
Dry Weight	866 lbs (392 kg)	
Dimensions	69.4" x 28.1" x 57.2" (1764 x 714 x 1453 mm)	

## Additional Feature Options:

- Glycol Heat Trace
- Extreme Low Temperature Module
- Remote Monitoring
- Extended Standby
- Three Stage Battery Charging
- Configurable Voltage Outputs
- Gas Pressure Reduction System
- Fuel Conditioning
- Solar Hybrid Compatible
- Heat Recovery
- Enhanced Security

1. For detailed performance data, please request the engineering specification document  
 2. Additional electrical output configurations available

## Additional Models and Configurations

### PowerGen Landfill Gas (LFG)

The PowerGen LFG provides unmanned, reliable, and stable electricity from landfill gas as a standalone power source or back feeding to the grid.

### PowerGen Solar Hybrid

Qnergy's solar hybrid system leverages the PowerGen Stirling engine to supplement photovoltaic power creating the most reliable off-grid power system.

### MultiPlex

The MultiPlex system combines the power of 2+ PowerGen's into a single bus that is inverted and provides a configurable and neutral 3 phase 208 - 480 Vac output.

### VRU <sup>1</sup>

Qnergy's VRU enables the recovery of otherwise vented methane in oil or condensate storage tanks, wellhead casing vent gas or pipeline compressor vent seals.

### PowerGen EXP (ATEX-rated) <sup>1</sup>

PowerGen EXP brings the remote power reliability of the PowerGen's Stirling engine to on-and off-shore applications that require hazardous operating certifications.

1. Expected product launch in 2025

# CAP Compressed Air Pneumatics

Qnergy's innovative low-maintenance CAP solutions efficiently replace normally vented methane from pneumatic controllers with clean, dry instrument air. The CAP product line offers grid-tied applications and off-grid solutions powered by Qnergy's PowerGen, or a solar PV option with the CAP Pico.



New



**CAP Pico**  
0.5 - 1 scfm

**CAP V**  
3, 5.5, or 10.5 scfm



**CAP M** 7.5 scfm



**CAP F** 12 scfm

## Features

- 0.5 to 12 scfm continuous dry air output at 100 to 140 psi per unit options
- Accurate air flow measurement
- Redundant robust duplex compressors
- Integrated air dryer
- HMI for local data review and control
- Powered by our proprietary PowerGen, grid connection, or PV Pico Option

## Benefits

- Direct AC compressor drive eliminates the need for battery banks
- Auxiliary grid-quality output power 1000W+ (if paired with a PowerGen)
- Qnergy Dashboard remote monitoring service and reporting
- Modular design available for higher air output
- Eliminates “wet-gas” pneumatic issues
- Eligible for emissions offset carbon credits

## CAP Product Specifications

CAP Models	Pico	V Series	M	F <sup>3</sup>
<b>Air Flow<sup>1</sup></b>	0.5-1 scfm at 35 psi <sup>2</sup>	3, 5.5 or 10.5 scfm at 130 psi	7.5 scfm at 130 psi 10 scfm at 100 psi	12 scfm at 100 psi
<b>Dimensions</b>	87" x 51.2" x 84.2" (2.21 x 1.3 x 2.139m)	29" x 25.2" x 65.8" (0.74 x 0.64 x 1.67m)	115.4" x 45" x 62.7" (2.93 x 1.14 x 1.59m)	13.5' x 9.5' x 10' (4.11 x 2.90 x 3.05m)
<b>Weight</b>	1,338 lbs (607 kg)	515 lbs (234 kg)	1,490 lbs (676 kg)	7,800 lbs (3,538 kg)
<b>Enclosure</b>	IP54 enclosure	Heated/ventilated enclosure	Heated/ventilated R12 enclosure	Lighting, ventilation, gas detection
<b>Air Tank</b>	20 gallon	2 gallon	80 gallon	80 gallon

1. Higher pressure output available
2. Performance depends on solar sizing and location
3. CAP F is fully customizable

## Available Options:

<b>Glycol Heat Trace<sup>1</sup></b>	<b>Waste Heat Recovery<sup>1</sup></b>	<b>Battery Bank and DC Distribution</b>	<b>Skid Mounting</b>	<b>External Air Tank</b>
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1. When paired with Qnergy's PowerGen

# Dashboard

## Remote Monitoring and Regulation Compliance

Qnergy Dashboard is a web-based application that allows customers to view operational status of their Qnergy products and accurately report methane emissions. Additionally, Dashboard customers receive real-time remote support. The data is accessible via browser on desktop computer or mobile device, or via API integration with any standard interface.

### Benefits

- Export Compliance Data
- View Status and Performance of All Units
- Real-Time Remote Support
- Analytics (Charts and Graphs)
- Event Log Details
- Email Alerts
- No Software to Download



Dashboard view provides a summary of operating conditions for all units in the customer's network.

# About Qnergy

Qnergy is dedicated to assisting our customers in mitigating methane emissions. With the remarkable capabilities of our linear Free Piston Stirling Engine, we provide a dependable source of clean energy using raw, unprocessed methane.

To date, we have successfully deployed thousands of units, resulting in the reduction of hundreds of thousands of tons of methane emissions.



## Power Generators



## Methane Emissions Mitigation Solutions



## Enabling Energy Innovation

### Headquarters

300 West 12<sup>th</sup> St.  
Ogden, UT 84404

### Sales Inquiries

[sales@qnergy.com](mailto:sales@qnergy.com)  
1.801.752.0100

### General Inquiries

[info@qnergy.com](mailto:info@qnergy.com)  
1.801.752.0100