## Power where you need it.®



Authorized Distributor Linc Energy Systems LincEnergySystems.com

## ADVANTAGES OF GPT'S THERMOELECTRIC GENERATORS

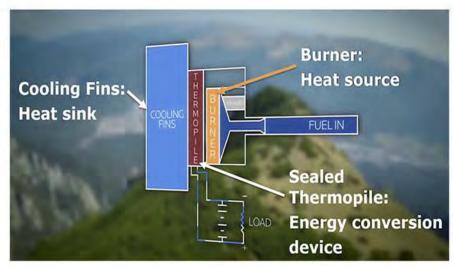
- **High Reliability:** Solid-state design ensures trouble free operation and the most reliable power supply system available.
- Low Maintenance: 1 to 2 hours per year is a pro-active maintenance schedule.
- **Competitive Price:** GPT's TEG systems have extremely competitive capital and operating costs for systems from 5 Watts to 5000 Watts and above.
- Long Life: Single sealed thermopile has a 20 year design life with only 0.2% degradation per year. Generator field experience over 20 years.
- Continuous Operation In All Conditions: Operation is not affected by weather, dust or other airborne contaminants.
- **Easy Operation:** Single burner with a 20 year design life is easy to operate and stable in all weather conditions.
- **Reduced System Size:** Physical layout of GPT TEG systems is smaller than solar or other generator options.
- **Increased Security:** GPT TEG installations are low visibility and can be mounted inside security shelters if required.
- Reduced Battery Requirements: Due to continuous operation of GPT TEGs.
- Extended Battery Life: Due to decreased deep cycling.
- **Quality:** GPT TEGs are produced to ISO 9001 requirements.

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## **TEGs: SIMPLE, INNOVATIVE TECHNOLOGY**



Gentherm Global Power Technologies (GPT) manufactures thermoelectric generators (TEGs), convert heat directly into electricity. As heat moves from a gas burner through a thermoelectric module, it causes an electrical current to flow.

The heart of a GPT thermoelectric generator is a hermetically sealed thermoelectric module (thermopile) which contains an array of lead-tin-telluride semiconductor elements. This durable module provides a chemically stable environment for the thermoelectric materials which ensures a long service life.

On one side of the thermopile, a gas burner is installed, while the opposite side is kept cool by aluminum cooling fins or a heat pipe assembly. An operating generator maintains a temperature of approximately 540°C on the hot side and 140°C on the cold side. The heat flow through the thermopile creates steady DC electricity with no moving parts.

Gentherm Global Power Technologies (GPT) puts power where you need it most. We specialize in remote power solutions for a variety of remote industrial applications – anywhere in the world.

GPT systems are known to be extremely reliable with minimal maintenance and training required. Our client list circles the globe and includes many well-known projects. Whether you are looking for a primary system or a back-up, incorporating solar into the mix, or overcoming a logistical challenge, we can help. GPT's products are ideal for a variety of applications:

- Oil, gas, product or water pipelines
- Well sites
- Offshore platforms
- Telecommunication sites
- Cathodic protection (Gas well, pipelines and other)
- Well monitoring and automation
- Security and surveillance
- Navigational aids
- Communication systems

## For more information:

- Contact your GPT sales representative
- Visit our website.

GPT offers engineering design support to match your site needs with the right products.

