

# The global leader in remote power solutions

**Power where you need it.®**





## About us



Power where you need it.®

**There's only one company that provides reliable, cost-effective off-grid power to some of the most remote and environmentally challenging places on Earth...  
Gentherm Global Power Technologies.**

Gentherm Global Power Technologies (GPT) was established in 1975 to commercialize thermoelectric generator technology originally developed for the Apollo Space Program. Today, GPT is the world leader in the manufacturing and distribution of thermoelectric generators (TEGs) for use as remote power sources.

GPT manufactures a range of generators, from 5 to 550 watts, using heat to directly produce electrical power for applications requiring up to 5,000 watts of power. GPT generators operate on natural gas, propane, or liquefied petroleum gas to provide highly reliable, cost-effective, **Power where you need it.®**

Industries								
	Upstream	Midstream	Offshore	Telecom	Security & Surveillance			
	Benefits							
		Small Footprint	Field Proven	Minimal Maintenance	Solid State Design	No Battery Bank Required	5-5,000 Watts of Power	Global Service & Support



Desert heat



Extreme cold



Dense jungles



Ocean and offshore



Adverse weather



Forestry

55+

Countries around  
the world

40+

Years' experience

2,000+

Engineered drawings  
per year

35,000+

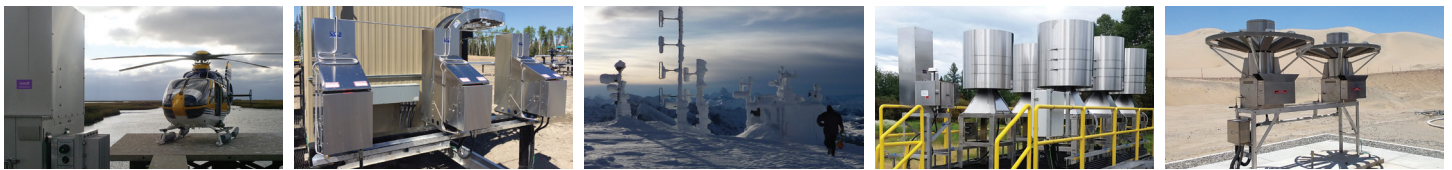
TEGs deployed globally

52,000+

Manufacturing hours per year



# Thermoelectric Generators (TEGs)



**The TEG's solid-state design ensures trouble-free, reliable operation in any environment. Thermoelectric generators are at work around the world in more than 55 countries and 35,000+ locations.**

Thermoelectric generators convert heat directly into electricity. As heat moves from a gas burner through the thermoelectric module, it causes an electrical current to flow. The heart of the thermoelectric generator is a hermetically sealed thermoelectric module called a thermopile.

GPT's thermoelectric generators can be configured to provide up to 5,000 watts of remote, unattended power. Various TEG models are available to meet any condition, including hazardous areas.

## TEG Models:

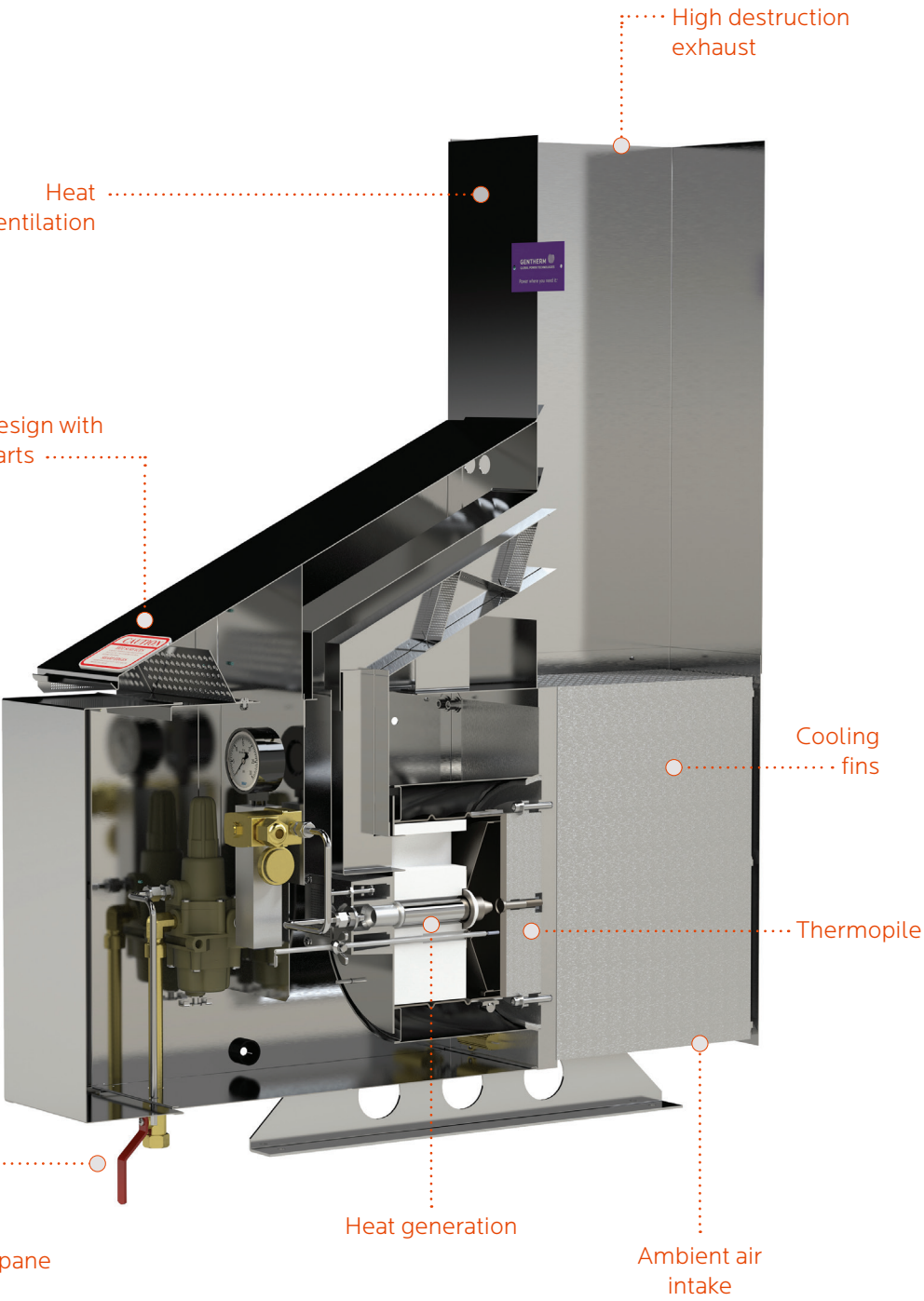
 <p>⚡ 21W</p> <p><b>5030</b></p>	 <p>⚡ 50W ⚡ 100W</p> <p><b>P-5050/5100</b></p>	 <p>⚡ 54W ⚡ 60W</p> <p><b>5060</b></p>	 <p>⚡ 108W ⚡ 120W</p> <p><b>5120</b></p>	 <p>⚡ 178W ⚡ 195W</p> <p><b>5220</b></p>
 <p>⚡ 460W ⚡ 520W</p> <p><b>S-8500</b></p>	 <p>⚡ 480W ⚡ 550W</p> <p><b>8550</b></p>	 <p>⚡ 100W</p> <p><b>1120</b></p>	 <p>⚡ 500W</p> <p><b>1500</b></p>	 <p>⚡ 100W</p> <p><b>S-1100 NEW</b></p>



# Thermoelectric Generators



Thermoelectric generators convert heat directly into electricity.



Reliable operation in extreme environmental conditions



Extreme Cold



Extreme Heat



Adverse Weather



Complete Darkness

Ideal for:



Valve Operation



SCADA/Telecom



Instrumentation



Cathodic Protection



Leak Detection

-40°C

Reliable operation in extreme temperatures

+40°C



Power where you need it.®



## Gentherm Global Power Technologies offers a full range of solutions for reliable, industrial power in remote locations.

When power is unavailable, or grid power unreliable, GPT can provide a cost-effective remote power solution for your business. GPT has consistently met the needs of industries operating around the world, each with unique power challenges.



### SCADA

Power Supervisory Control and Data Acquisition (SCADA) systems for monitoring, measuring and controlling equipment in the field. TEGs are utilized for telemetry units, gas analyzers, metering equipment, emergency shutdown and more



### Valve Automation

From solenoid valve control to instrumentation lines to actuation on distribution block valve stations, TEGs supply reliable remote power for remote control and monitoring.



### Cathodic Protection

When corrosion is the problem, cathodic protection is the solution. Thermoelectric generators provide a reliable source of cost-effective continuous current to minimize corrosion on pipelines.



### Communications

Being connected in remote areas has often been a challenge due to lack of available grid infrastructure. TEGs solve this issue by offering reliable and continuous off-grid power in even the most remote environments.



### Offshore Platforms

TEGs are the perfect solution for harsh and highly corrosive offshore environments. Provide primary power for unmanned platforms and backup power on manned platforms, including hazardous environments.



### Security and Surveillance

Compared to most power generators, TEGs are very quiet and are well suited for security and surveillance applications, especially for remote, off-grid areas that require protection.



# Every Watt Counts



## We know power. **Gentherm's team of engineering professionals knows power.**

Gentherm Global Power Technologies works closely with clients to ensure the highest possible reliability in a remote power solution. GPT's Engineering Department will advise and recommend the best power options to meet the electrical demand of the site.

Design oversights can be costly and time-consuming. Common design oversights include: treating off-grid sites like grid power sites; overlooking operating expenses; selecting an unreliable power source for critical loads; misunderstanding the load profile; choosing the incorrect backup battery bank; and meeting regulatory mandates.

### Site considerations:

Site Access

Extreme weather & temperature

Space restrictions

Hazardous areas

Fuel options

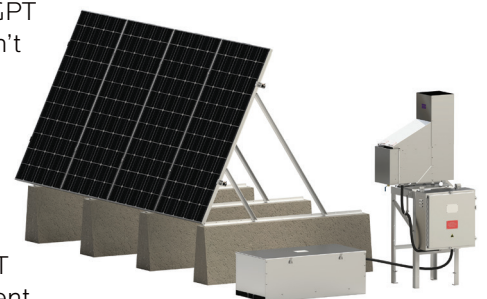
Operation & maintenance

### Retrofit it.

Does your current remote power supply offer the reliability of a TEG system? If not, GPT can retrofit your existing power system to increase reliability and ensure power doesn't fail when you need it most. TEGs are often the perfect companion to photovoltaic (solar) and battery-based systems. A TEG can directly charge your battery bank, extending life in adverse conditions such as cold, dark winter months.

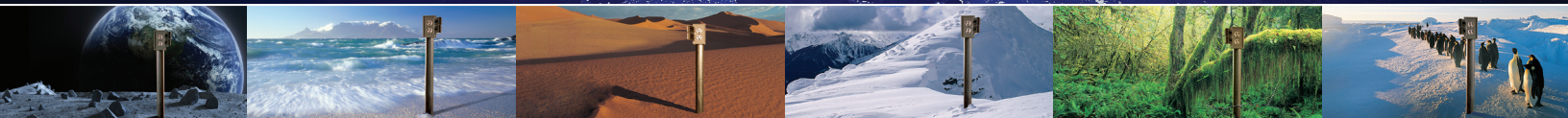
### Beyond TEGs

Power is what we do. Whether thermoelectric generation, photovoltaic or hybrid, GPT designs and manufactures remote power solutions for any situation in any environment.





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