

# Tactical Hybrid Generator-THG™

Integrated Hybrid System for 3kW Tactical Quiet Generator (TQG)



THG™ Unit

The THG™ is a hybrid power system that increases the performance and reliability of the legacy 3 kW Tactical Quiet Generator. The THG™ installs beneath the base of any 3 kW TQG.

The THG™ is ideal for applications with average loads that underutilize generator capacity, resulting in wasted fuel. Through the addition of energy storage and power management, the THG™ takes over cycling of the generator, reducing fuel consumption, while delivering digital-quality pure sine wave AC power.

## Key Features

- Up to 3 kW output power
- 120 V / 240 V output
- Automatic remote start-stop
- Emergency stop button
- Lithium Iron Phosphate batteries
- Second battery port for additional storage
- Optional solar panels to charge anywhere

## Key Benefits

- Provides temporary uninterrupted silent back-up power up to 3.4kW
- Extends TQG lifetime
- Reduce TQG fuel usage up to 50%
- Ease of assembly/disassembly (4 bolts & 2 connectors)
- Mission-ready
- No additional maintenance
- Ruggedized packaging
- Proven reliability
- Proven field performance

## Applications

- Forward operating bases
- Weapon systems
- Remote sensors & relays
- GPS systems
- C4ISR equipment
- Silent watch
- Force protection systems
- Expeditionary communications
- Auxiliary power



THG™  
Integrated  
with TQG

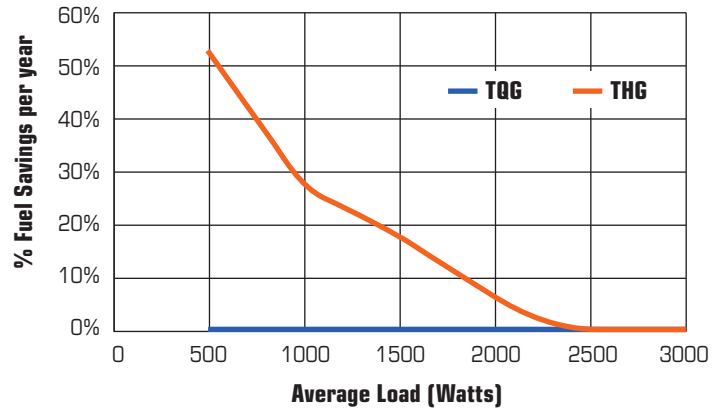
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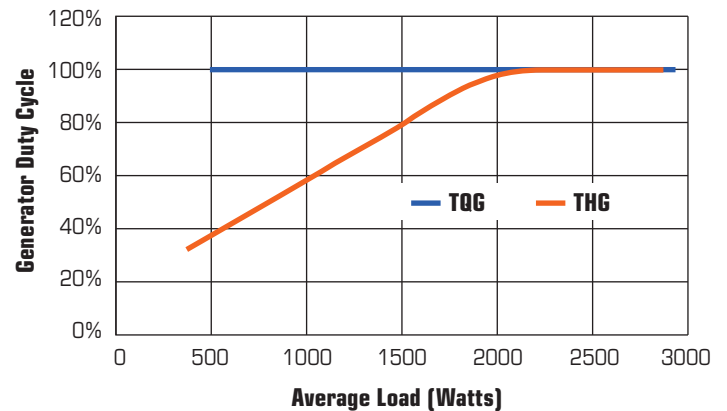


## Fuel Savings and Duty Cycle at Various Load Profiles

THG™ Fuel Savings vs Load



TQG vs THG™ Fuel Duty Cycle



## Electrical Parameters

<b>AC Output</b>	3.4 kW Max, 6.8 kW Surge
<b>AC Service</b>	120 / 240 V, 60 Hz
<b>AC Outlets</b>	120 V, 10 A
<b>DC Service</b>	24 V NATO, 150 A
<b>Battery</b>	Two 1.3 kWh LiFePO4
<b>Solar Option</b>	560 W, 33.16 V per clamshell

## Physical Parameters

<b>Weight (THG™)</b>	207 lbs / 94 kg
<b>Weight (integrated)</b>	477 lbs / 216.5 kg dry
<b>Dimensions (THG™)</b>	34.6" L x 27.5" W x 13.0" H
<b>Dimensions (integrated)</b>	34.6" L x 27.5" W x 39.5" H
<b>IP Rating</b>	IP65
<b>Operating Temp</b>	-4° F to 140° F (-20° C to 60° C)

### Notes:

- TQG Data supplied by U.S. Army Expeditionary Energy & Sustainment Systems (E2S2)
- Based upon HOMER simulation with 3.4 kW inverter output power (HOMER is the standard for microgrid optimization)
- Continuous loads exceeding 2300 W should be run in Generator only, bypassing the THG™ Hybrid module
- Generator Duty cycle assumes standalone TQG in continuous duty (24 hrs x 365 = 8760 hrs per year)
- THG™ Duty cycle based upon auto start stop with loads supplied by battery module, generator run for recharge

