## **MODEL S-1100**

# GENTHERM GLOBAL POWER TECHNOLOGIES

Hazardous Area Thermoelectric Generator

The S-1100 Thermoelectric Generator is IECEx, ATEX, UL (Class 1, Zone 1) and CSA (Class 1, Div 1) hazardous area rated. With no moving parts, it is a reliable, low maintenance source of DC electrical power for any application where regular utilities are unavailable or unreliable.

#### **KEY DESIGN FEATURES:**

- Automatic Spark Ignition (SI)
- Automatic Fuel Shut-Off (SO)
- Fuel Filter
- ✓ Low Voltage Alarm Contacts (VSR)
- ✓ Output Voltage & Current 4–20 mA Signal
- ✓ Digital Volt & Amp Meter
- ✓ Flame Arrestors
- ✓ Reverse Current Protection

#### **OPTIONAL FEATURES:**

- Intake Air Filter
- Start-up Battery
- ✓ Stand

Power Specifications	Power Rating at 20°C:
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100 Watts @ 12 Volts 100 Watts @ 24 Volts

#### Electrical

#### Output Adjustment Range:

12 V 11.5–15.5 Volts 24 V 23.0–31.0 Volts

Output: Terminal block which accepts up to 6 AWG (up to  $16 \,\mathrm{mm^2}$ ) wire. Opening for three 1" NPT ports in electrical housing.

#### Fuel Requirements

#### Natural Gas:

 $8.4 m^{3}/day (295 Sft^{3}/day) \\ 1000 BTU/Sft^{3} (37.7 MJ/Sm^{3}) gas \\ max 115 mg/Sm^{3} (~170 ppmw) H_{2}S \\ max 120 mg/Sm^{3} H_{2}O$ 

#### Propane:

10.8 l/day (2.85 US gal/day)

Max. Supply Pressure: 172 kPa (25 psi)
Min. Supply Pressure: 103 kPa (15 psi)
Fuel Connection: 1/4" MNPT

#### Construction

#### Materials:

Enclosures: Cast Aluminum
Cooling Type: Natural Convection

Fuel System: Aluminum & Stainless Steel

Cabinet: Stainless Steel



#### Environmental

#### Ambient Operating Temperature:

Max. +60°C (140°F) Min. -40°C (-40°F)\*

IECEx, ATEX and UL certifications apply down to -20°C.

#### Operating Conditions:

Unsheltered operation, certified for use in hazardous areas

#### Operating Altitude:

Up to 3,000m

#### Certifications

#### IECEx, ATEX

- II 2 G Ex db IIA T3 Gb
- -20°C (-4°F) to +60°C (140°F)

#### CSA

- Class 1, Div 1 GR D T3
- -40°C (-40°F) to +60°C (140°F)
- CSA TIL R-10

#### UL

- Class 1, Zone 1 AEx db IIA T3 Gb
- -20°C (-4°F) to +60°C (140°F)

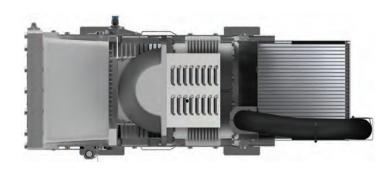
#### Note:

Specification data stated in this document is subject to change without notice. To verify these specifications are current, please contact your GPT sales representative. Data based on standard conditions:  $15^{\circ}$ C ( $59^{\circ}$ F), one atm.

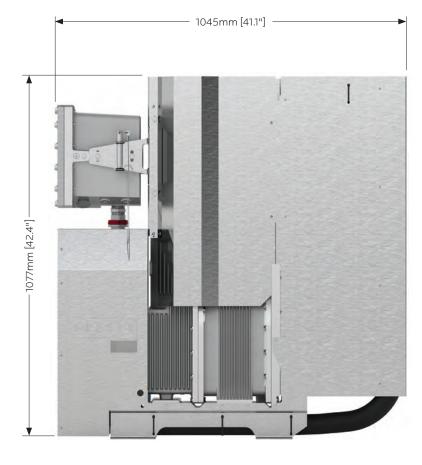
 $^{*}$  Please contact GPT for use in ambient temperatures below -10  $^{\circ}\text{C}$  (14  $^{\circ}\text{F}).$ 











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Generator Weight: 178 kg [393 lb] Model: S-1100

### **Gentherm Global Power Technologies**

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