

# MODEL S-1100

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

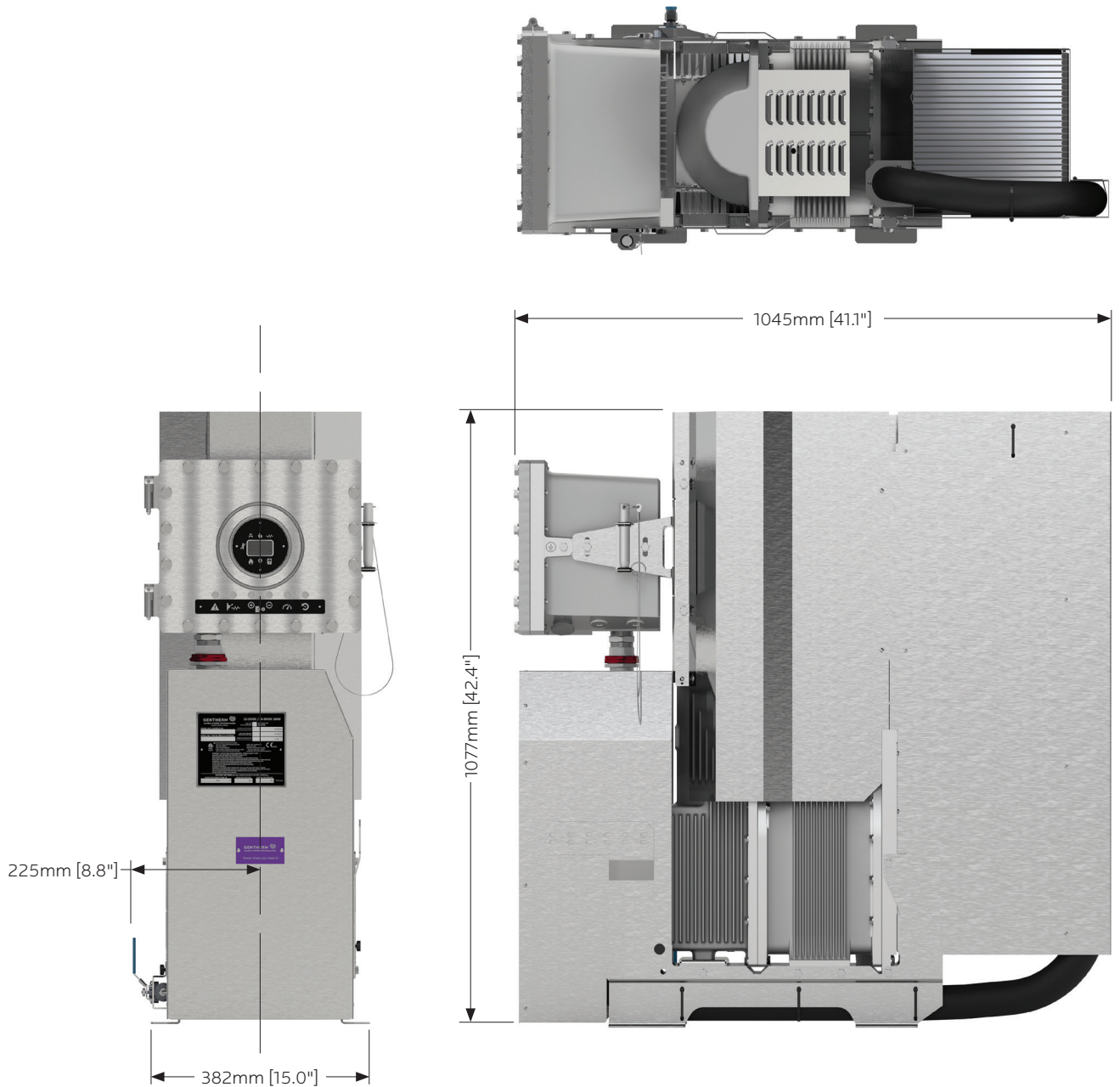


Specification Sheet

<b>Power Specifications</b>	Power Rating at 20°C: 100 Watts @ 12 Volts 100 Watts @ 24 Volts
<b>Electrical</b>	Output Adjustment Range: 12 V    11.5–15.5 Volts 24 V    23.0–31.0 Volts
<b>Output:</b>	Terminal block which accepts up to 6 AWG (up to 16mm <sup>2</sup> ) wire. Opening for three 1" NPT ports in electrical housing.
<b>Fuel Requirements</b>	Natural Gas: 8.4m <sup>3</sup> /day (295 Sft <sup>3</sup> /day) 1000 BTU/Sft <sup>3</sup> (37.7 MJ/Sm <sup>3</sup> ) gas max 115 mg/Sm <sup>3</sup> (~170 ppmw) H <sub>2</sub> S max 120 mg/Sm <sup>3</sup> H <sub>2</sub> 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
<b>Construction</b>	Materials: Enclosures: Cast Aluminum Cooling Type: Natural Convection Fuel System: Aluminum & Stainless Steel Cabinet: Stainless Steel

<b>Environmental</b>	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
<b>Certifications</b>	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°C (59°F), one atm.  
\* Please contact GPT for use in ambient temperatures below -10°C (14°F).



**NOTES:**

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

**Gentherm Global Power Technologies**

**p** 403 236 5556  
**e** [gptsales@gentherm.com](mailto:gptsales@gentherm.com)  
**w** [genthermglobalpower.com](http://genthermglobalpower.com)

16, 7875 – 57 Street SE  
Calgary, Alberta, Canada T2C 5K7