

**Energy Conversion Products** 

# **C1000S Microturbine**

**Low-pressure Natural Gas** 

The Signature Series Microturbine provides IMW of reliable electrical power in one small, ultra-low emission, and highly efficient package.



C1000S Power Package

#### Electrical Performance(1)

Electrical Power Output	950kW
Voltage	400/480 VAC
Electrical Service	3-Phase, 4 Wire Wye
Frequency	50/60 Hz
Electrical Efficiency LHV	31%

# Fuel/Engine Characteristics(1)

Natural Gas HHV	35.4-42.8 MJ/m³ (950-1,150 BTU/scf)
Inlet Pressure(2)	1.7–34.5 kPa gauge (0.25–5.0 psig)
Fuel Flow HHV	12,150 MJ/hr (11,500,000 BTU/hr)
Net Heat Rate LHV	11.6 MJ/kWh (11,000 BTU/kWh)

#### Exhaust Characteristics(1)

NOx Emissions @ 15% O <sub>2</sub>	< 9 ppmvd (18 mg/m³)
Exhaust Mass Flow	6.7 kg/s (14.7 lbm/s)
Exhaust Gas Temperature	280°C (535°F)

#### **Benefits**

- Ultra-low emissions
- One moving part minimal maintenance and downtime
- Patented air bearings no lubricating oil or coolant
- Integrated utility synchronization – no external switchgear
- Internal fuel gas compressor housed within enclosure
- Compact modular design allows for easy, low-cost installation
- High electrical efficiency over a very wide operating range
- High availability part load redundancy
- Remote monitoring and diagnostic capabilities
- Proven technology with tens of millions of operating hours
- Various Factory Protection Plans available

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### Dimensions & Weight<sup>(3)</sup>

Width x Depth x Height	3.0 x 9.1 x 3.0 m (117 x 360 x 119 in)
Weight - Grid Connect Model	18,500 kg (40,700 lbs)
Weight - Dual Mode Model	22,000 kg (48,500 lbs)

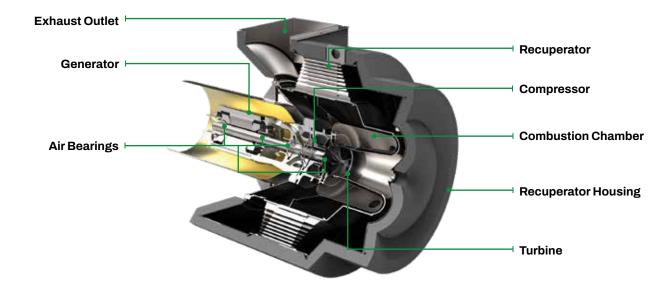
## Minimum Clearance Requirements<sup>(4)</sup>

Horizontal Clearance	
Left	1.5 m (60 in)
Right	0.0 m (0 in)
Front	1.7 m (65 in)
Rear	2.2 m (85 in)

# Certifications

- UL 2200 Listed
- CE Certified
- · Certified to the following grid interconnections standards: UL 1741-SA, VDE, BDEW, CEI 0-16, **AS4777**
- Compliant to California Rule 21

## **C200 Engine Components**



<sup>(1)</sup> Nominal full power performance at ISO conditions: 15°C (59°F), 14.696 psia, 60% RH

<sup>(2)</sup> For critical cyclic (on/off) applications, a gas inlet pressure of 5 psig may be a requirement. Consult with Capstone's Application Engineering team