

Energy Conversion Products

C1000S Microturbine

High-pressure Natural Gas

The Signature Series Microturbine provides 1MW of reliable electrical power in one small, ultra-low emission, and highly efficient package.



C1000S Power Package

Electrical Performance(1)

Electrical Power Output	1000kW
Voltage	400/480 VAC
Electrical Service	3-Phase, 4 Wire Wye
Frequency	50/60 Hz
Electrical Efficiency LHV	33%

Fuel/Engine Characteristics(1)

Natural Gas HHV ⁽²⁾	30.7–47.5 MJ/m³ (825–1,275 BTU/scf)
Inlet Pressure	517–551 kPa gauge (75–80 psig)
Fuel Flow HHV	12,000 MJ/hr (11,400,000 BTU/hr)
Net Heat Rate LHV	10.9 MJ/kWh (10,300 BTU/kWh)

Exhaust Characteristics(1)

NOx Emissions @ 15% O ₂	< 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
- 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

Smarter Energy for a Cleaner Future

Dimensions & Weight⁽³⁾

Width x Depth x Height	3.0 x 9.1 x 3.0 m (117 x 360 x 119 in)
Weight - Grid Connect Model	17,100 kg (37,700 lbs)
Weight - Dual Mode Model	20,650 kg (45,500 lbs)

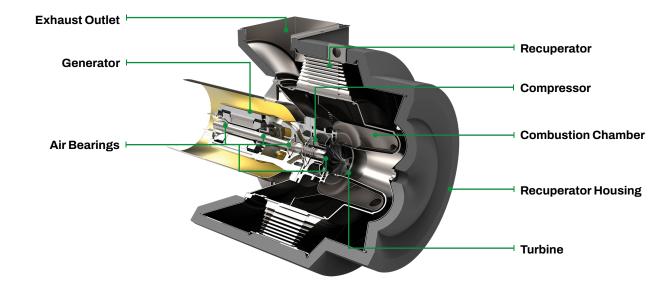
Minimum Clearance Requirements⁽⁴⁾

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





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

⁽²⁾ Suitable for use with fuel blends containing up to 30 percent hydrogen gas by volume

⁽³⁾ Approximate dimensions and weights

⁽⁴⁾ Clearance requirements may increase due to local code considerations Specifications are not warranted and are subject to change without notice.