

C1000 Megawatt Power Package High-pressure Natural Gas



1 MW of reliable electrical power in one small, ultra-low emission and highly efficient package.

- High electrical efficiency over a very wide operating range
- Low maintenance air bearings require no lube oil or coolant
- Ultra-low emissions
- High availability – part load redundancy
- Proven technology with tens of millions of operating hours
- Integrated utility synchronization and protection with a modular design
- 5 and 9 year factory protection plans available
- Remote monitoring and diagnostic capabilities
- Internal fuel gas compressor available for low fuel pressure Natural Gas applications



C1000 Power Package

Electrical Performance⁽¹⁾

Electrical Power Output	1000 kW
Voltage	400 to 480 VAC
Electrical Service	3-Phase, 4 wire
Frequency	50/60 Hz, grid connect operation 10-60 Hz, stand alone operation
Maximum Output Current	1,450A RMS @ 400V, grid connect operation 1,200A RMS @ 480V, grid connect operation 1,550A RMS, stand alone operation ⁽²⁾
Electrical Efficiency LHV	33%

Fuel/Engine Characteristics⁽¹⁾

Natural Gas HHV	30.7 to 47.5 MJ/m ³ (825 to 1,275 BTU/scf)
Inlet Pressure ⁽³⁾	517-552 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⁾

	Standard	CARB Version
NOx Emissions @ 15% O ₂ ⁽⁴⁾	9 ppmvd (18 mg/m ³)	4 ppmvd (8 mg/m ³)
NOx/Electrical Output ⁽⁴⁾	0.14 g/bhp-hr (0.4 lb/MWhe)	0.05 g/bhp-hr (0.14 lb/MWhe)
Exhaust Gas Flow	6.7 kg/s (14.7 lbm/s)	6.7 kg/s (14.7 lbm/s)
Exhaust Gas Temperature	280°C (535°F)	280°C (535°F)
Exhaust Energy	7,100 MJ/hr (6,750,000 BTU/hr)	7,100 MJ/hr (6,750,000 BTU/hr)

Reliable power when and where you need it. Clean and simple.

Dimensions & Weight⁽⁵⁾

Width x Depth x Height	2.4 x 9.1 x 2.9 m (96 x 360 x 114 in)
Weight - Grid Connect Model	14106 kg (31,000 lbs)
Weight - Dual Mode Model	17191 kg (37,900 lbs)

Minimum Clearance Requirements⁽⁶⁾

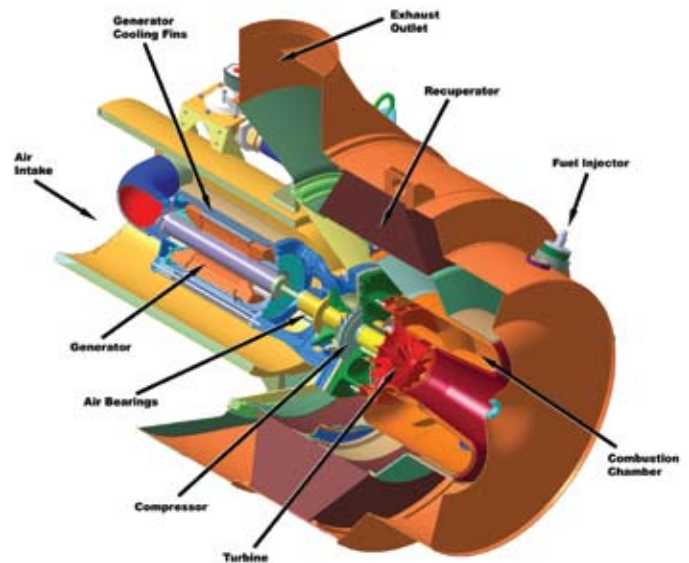
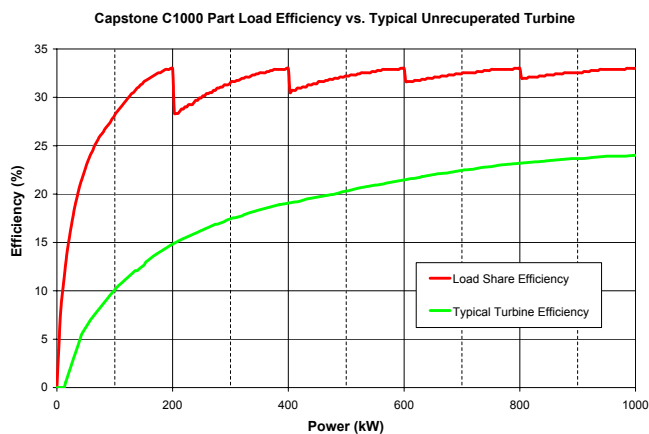
Vertical Clearance	0.6 m (24 in)
Horizontal Clearance	
Left & Right	1.5 m (60 in)
Front	1.5 m (60 in)
Rear	1.8 m (72 in)

Sound Levels

Acoustic Emissions at Full Load Power	
Nominal at 10 m (33 ft)	65 dBA

Certifications

- UL 2200 and UL 1741 for natural gas operation⁽⁷⁾
- Will comply with IEEE 1547 and will meet statewide utility interconnection requirements for California Rule 21 and the New York State Public Service Commission
- CE certified



C200 Engine

- (1) Nominal full power performance at ISO conditions: 59°F, 14.696 psia, 60% RH
 - (2) With linear load
 - (3) Inlet pressure for standard natural gas at 39.4 MJ/Nm³ (1,000 BTU/scf) (HHV)
 - (4) Emissions for standard natural gas at 39.4 MJ/Nm³ (1,000 BTU/scf) (HHV)
 - (5) Approximate dimensions and weights
 - (6) Clearance requirements may increase due to local code considerations
 - (7) All natural gas models are planned to be UL Listed
- Specifications are not warranted and are subject to change without notice.*

