

C1000S Megawatt Power Package

Digester Gas



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

- + Ultra-low emissions
- + Accepts sour gas fuels with up to 5,000 ppm H₂S
- + 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



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⁾

Digester Gas HHV	20.5–32.6 MJ/m ³ (550–875 BTU/scf)
H ₂ S Content	<5,000 ppm
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⁾

NO _x Emissions @ 15% O ₂	< 9 ppmvd (18 mg/m ³)
Exhaust Mass Flow	6.7 kg/s (14.7 lbm/s)
Exhaust Gas Temperature	280°C (535°F)

Dimensions & Weight⁽²⁾

Width x Depth x Height ⁽³⁾	3.0 x 9.1 x 2.9 m (117 x 360 x 114 in)
Weight - Grid Connect Model	17,000 kg (37,400 lbs)
Weight - Dual Mode Model	20,500 kg (45,200 lbs)

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

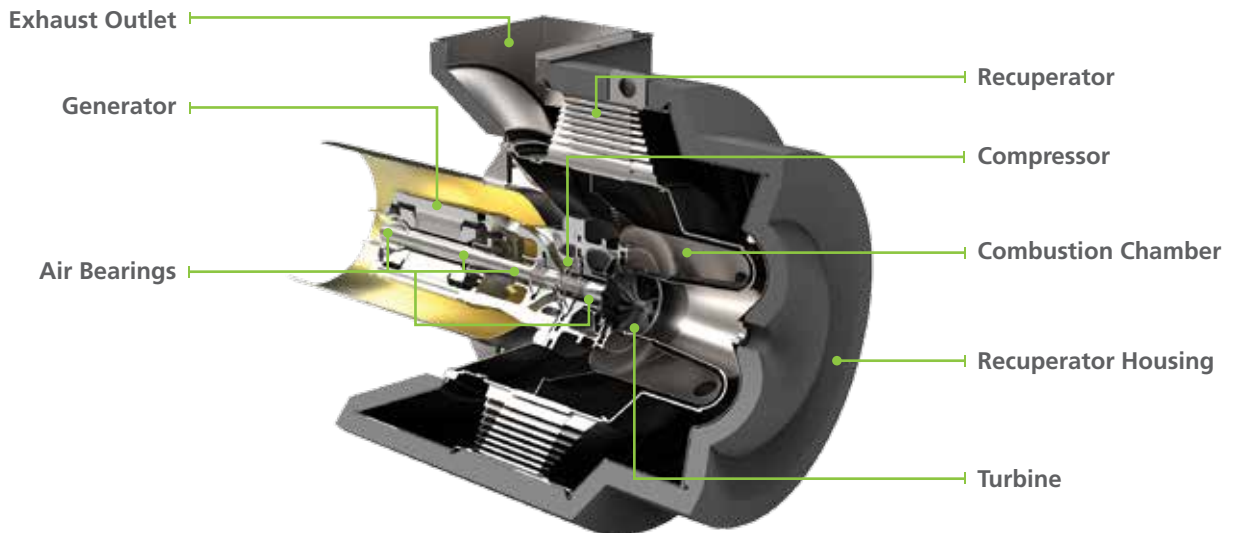
Minimum Clearance Requirements⁽⁴⁾

Horizontal Clearance	
Left	1.5 m (60 in)
Right	0.0 m (0 in)
Front	1.7 m (65 in)
Rear	2.0 m (80 in)

Certifications

- UL 2200 Listed
- CE Certified
- Certified to the following grid interconnection standards: UL 1741, VDE, BDEW and CEI
- Compliant to California Rule 21 and New York State Public Service Commission

C200 Engine Components



(1) Nominal full power performance at ISO conditions: 15°C (59°F), 14.696 psia, 60% RH
 (2) Approximate dimensions and weights
 (3) Height dimensions are to the roof line. Exhaust outlet extends at least 152 mm (6 in) above the roof line
 (4) Clearance requirements may increase due to local code considerations
 Specifications are not warranted and are subject to change without notice.

