

# C200 & C200-CHP MicroTurbine Natural Gas



World's largest air-bearing microturbine produces 200kW of clean, green and reliable power.

- Ultra-low emissions
- One moving part: Minimal maintenance and downtime
- Patented air bearing: No lubricating oil or coolant
- 5 and 9 year Factory Protection Plans available
- Remote monitoring and diagnostic capabilities
- Integrated utility synchronization and protection
- Small, modular design allows for easy, low-cost installation
- Proven technology with tens of millions of run hours and counting
- Internal fuel gas compressor available for low fuel pressure Natural Gas applications



C200 MicroTurbine

## Electrical Performance<sup>(1)</sup>

Electrical Power Output	200kW
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	290A RMS @ 400V, grid connect operation 240A RMS @ 480V, grid connect operation 310A RMS, stand alone operation <sup>(2)</sup>
Electrical Efficiency LHV	33%

## Fuel/Engine Characteristics<sup>(1)</sup>

Natural Gas HHV	30.7 to 47.5 MJ/m <sup>3</sup>
Inlet Pressure <sup>(3)</sup>	517-552 kPa gauge
Fuel Flow HHV	2,400 MJ/hr (2,280,000 BTU/hr)
Net Heat Rate LHV	10.9 MJ/kWh (10,300 BTU/kWh)

## Exhaust Characteristics<sup>(1)</sup>

NOx Emissions @ 15% O <sub>2</sub> <sup>(4)</sup>	9 ppmvd (18 mg/m <sup>3</sup> )
NOx/Electrical Output <sup>(4)</sup>	0.14 g/bhp-hr
Exhaust Gas Flow	1.3 kg/s
Exhaust Gas Temperature	280°C
Exhaust Energy	1,420 MJ/hr (1,350,000 BTU/hr)

## C200-CHP Heat Recovery<sup>(8)</sup>

Integrated Heat Recovery Module Type	Copper Core
Hot Water Heat Recovery	284kW (965,000 BTU/hr)
Total System Efficiency LHV	81%

## Dimensions & Weight<sup>(5)</sup>

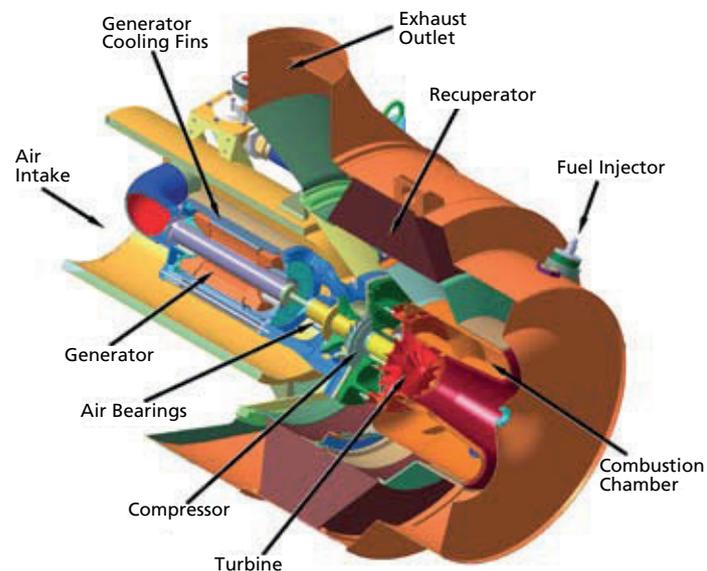
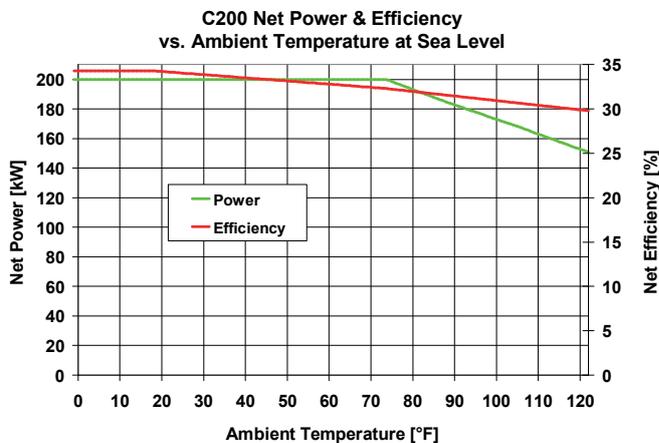
Width x Depth x Height <sup>(6)</sup>	1.7 x 3.7 x 2.5 m (67 x 144 x 98 in)
Weight – Grid Connect Model	2775 kg (6,120 lb)
Weight – Dual Mode Model	3413 kg (7,525 lb)

## Minimum Clearance Requirements<sup>(7)</sup>

Vertical Clearance	0.6 m (24 in)
Horizontal Clearance	
Left & Right	1.1 m (42 in)
Front	1.1 m (42 in)
Rear	1.8 m (70 in)

## Sound Levels

Acoustic Emissions at Full Load Power	
Nominal at 10 m	65 dBA



- (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/Nm<sup>3</sup> (1,000 BTU/scf) (HHV)
  - (4) Emissions for standard natural gas at 39.4 MJ/Nm<sup>3</sup> (1,000 BTU/scf) (HHV)
  - (5) Approximate dimensions and weight. Excludes CHP Recovery Module, supplied as separate stand alone unit
  - (6) Height dimensions are to the roof line. Exhaust outlet extends at least 200mm above the roof line
  - (7) Clearance requirements may increase due to local code considerations
  - (8) Heat recovery supplied as separate module
- Specifications are not warranted and are subject to change without notice.

