

# **C200S Microturbine**

Low-pressure Natural Gas, ICHP

### The Signature Series Microturbine provides reliable electrical/thermal generation from natural gas with ultralow emissions.





C200S ICHP Microturbine

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

Electrical Power Output	190kW
Voltage	400/480 VAC
Electrical Service	3-Phase, 4 Wire Wye
Frequency	50/60 Hz
Electrical Efficiency LHV	31%

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

Natural Gas HHV	35.4–42.8 MJ/m <sup>3</sup> (950–1,150 BTU/scf)
Inlet Pressure <sup>(2)</sup>	1.7–34.5 kPa gauge (0.25–5.0 psig)
Fuel Flow HHV	2,430 MJ/hr (2,300,000 BTU/hr)
Net Heat Rate LHV	11.6 MJ/kWh (11,000 BTU/kWh)

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

NOx Emissions @ 15% O <sub>2</sub>	< 9 ppmvd (18 mg/m³)
Exhaust Mass Flow	1.3 kg/s (2.9 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
- Multiple units easily combined act as single generating source
- 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 2.5 x 4.0 m (117 x 100 x 157 in)
Weight - Grid Connect Model, dry	6,300 kg (13,800 lbs)
Weight - Dual Mode Model, dry	7,000 kg (15,300 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)

#### ICHP Heat Recovery<sup>(5)</sup>

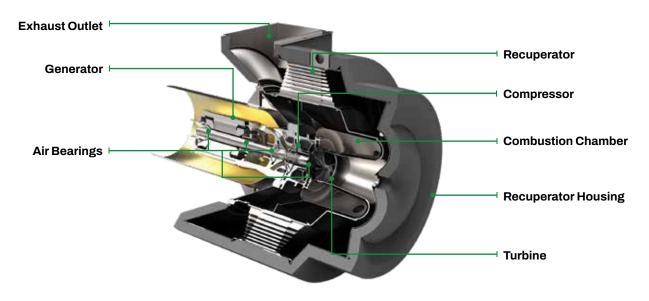
Hot Water Heat Recovery

300kW (1.0 MMBtu/hr)

# 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**



- Nominal full power performance at ISO conditions: 15<sup>°</sup>C (59<sup>°</sup>F), 14.696 psia, 60% RH
  For critical cyclic (on/off) applications, a gas inlet pressure of 5 psig may be a requirement. Consult with Capstone's Application Engineering team
- (3) Approximate dimensions and weights
- (4) Clearance requirements may increase due to local code considerations
- (5) Nominal heat recovery for water inlet temperature of 38°C (100°F) and flow rate of 6.3 l/s (100 gpm) Specifications are not warranted and are subject to change without notice.

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