

CR30 MicroTurbine Renewable Fuels



Achieve ultra-low emissions and reliable electrical generation from waste gas.

- Years of renewable experience
- Ultra-low emissions
- Operates on landfill or digester gas
- 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⁽¹⁾
- Small, modular design allows for easy, low-cost installation
- Reliable: Tens of millions of run hours and counting



CR30 MicroTurbine

Electrical Performance⁽²⁾

Electrical Power Output	30 kW
Voltage	400 to 480 VAC
Electrical Service	3-Phase, 4 wire
Frequency	50/60 Hz
Maximum Output Current	46A, grid connect operation
Electrical Efficiency LHV	26%

Fuel/Engine Characteristics⁽²⁾

Digester/Landfill Gas HHV	13.0 MJ/m ³ to 47.5 MJ/m ³ (350 to 1,275 BTU/scf)
H ₂ S Content	< 70,000 ppmv
Inlet Pressure – HHV dependent	552 kPa gauge (80 psig) @ 13.0 MJ/m ³ (350 BTU/scf) 517 kPa gauge (75 psig) @ 15.8 MJ/m ³ (425 BTU/scf) 483 kPa gauge (70 psig) @ 24.2 MJ/m ³ (650 BTU/scf) 448 kPa gauge (65 psig) @ 31.7 MJ/m ³ (850 BTU/scf)
Fuel Flow HHV	457 MJ/hr (433,000 BTU/hr)
Net Heat Rate LHV	13.8 MJ/kWh (13,100 BTU/kWh)

Exhaust Characteristics⁽²⁾

NO _x Emissions @ 15% O ₂ ⁽³⁾	9 ppmvd (18 mg/m ³)
Nox/Electrical Output ⁽³⁾	0.22 g/bhp-hr (0.64 lb/MWhe)
Exhaust Gas Flow	0.31 kg/s (0.69 lbm/s)
Exhaust Gas Temperature	275°C (530°F)

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

Dimensions & Weight⁽⁴⁾

Width x Depth x Height	0.76 x 1.5 x 1.9 m (30 x 60 x 77 in)
Weight	405 kg (891 lb)

Minimum Clearance Requirements⁽⁵⁾

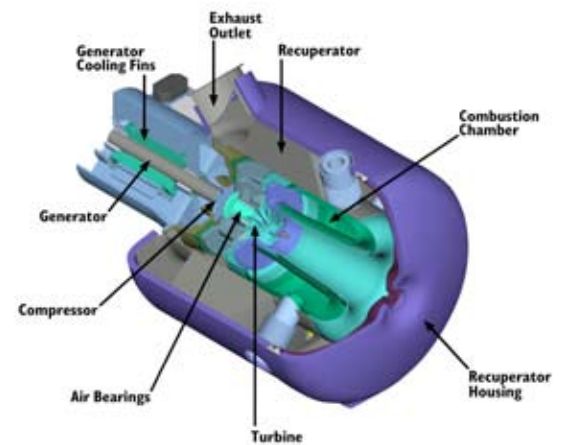
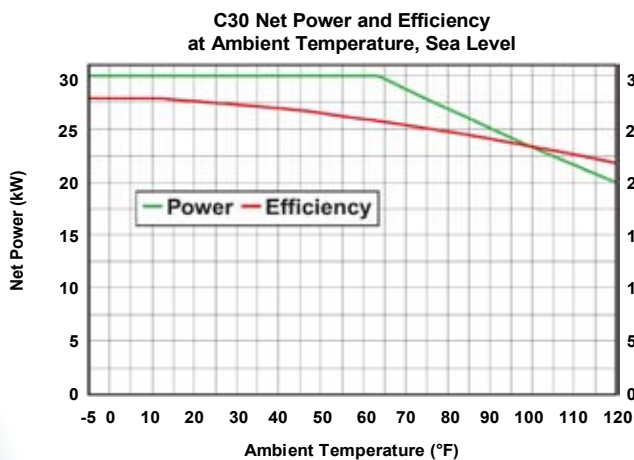
Vertical Clearance	0.61 m (24 in)
Horizontal Clearance	
Left & Right	0.76 m (30 in)
Front	0.93 m (37 in)
Rear	0.92 m (36 in)

Sound Levels

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

Certifications

- Models available with optional equipment for CE Marking



(1) Some utilities may require additional equipment for grid interconnectivity
 (2) Nominal full power performance at ISO conditions: 59°F, 14.696 psia, 60% RH
 (3) For surrogate landfill and digester gases. Please contact Capstone for additional details
 (4) Approximate dimensions and weights
 (5) Clearance requirements may increase due to local code considerations
 Specifications are not warranted and are subject to change without notice.

