

# C30 MicroTurbine Natural Gas



Robust power system achieves ultra-low emissions and reliable electricity from natural gas.

- 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<sup>(1)</sup>
- Small, modular design allows for easy, low-cost installation
- Reliable: Tens of millions of run hours and counting



C30 MicroTurbine

## Electrical Performance<sup>(2)</sup>

	High Pressure	Onboard Gas Compressor Option
Electrical Power Output	30kW	28kW
Voltage	400–480 VAC	400–480 VAC
Electrical Service	3-Phase, 4 wire	3-Phase, 4 wire
Frequency	50/60 Hz, grid connect operation 10–60 Hz, stand alone operation	50/60 Hz, grid connect operation 10–60 Hz, stand alone operation
Maximum Output Current	46A, grid connect operation 54A, stand alone operation <sup>(3)</sup>	46A, grid connect operation 54A, stand alone operation <sup>(3)</sup>
Electrical Efficiency LHV	26%	25%

## Fuel/Engine Characteristics<sup>(2)</sup>

	High Pressure	Onboard Gas Compressor Option
Natural Gas HHV	30.7–47.5 MJ/m <sup>3</sup> (825–1,275 BTU/scf)	30.7–47.5 MJ/m <sup>3</sup> (825–1,275 BTU/scf)
Inlet Pressure	345–379 kPa gauge (50–55 psig)	1.4–69 kPa gauge (0.2–10 psig)
Fuel Flow HHV	457 MJ/hr (433,000 BTU/hr)	444 MJ/hr (420,000 BTU/hr)
Net Heat Rate LHV	13.8 MJ/kWh (13,100 BTU/kWh)	14.4 MJ/kWh (13,700 BTU/kWh)

## Exhaust Characteristics<sup>(2)</sup>

	High Pressure	Onboard Gas Compressor Option
NOx Emissions @ 15% O <sub>2</sub> <sup>(4)</sup>	< 9 ppmvd (18 mg/m <sup>3</sup> )	< 9 ppmvd (18 mg/m <sup>3</sup> )
NOx / Electrical Output <sup>(4)</sup>	0.22 g/bhp-hr (0.64 lb/MWhe)	0.22 g/bhp-hr (0.64 lb/MWhe)
Exhaust Gas Flow	0.31 kg/s (0.69 lbm/s)	0.31 kg/s (0.69 lbm/s)
Exhaust Gas Temperature	275°C (530°F)	275°C (530°F)

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

## Dimensions & Weight<sup>(5)(6)</sup>

Width x Depth x Height	0.76 x 1.5 x 1.9 m (30 x 60 x 70 in)
Weight – Grid Connect Model	405 kg (891 lb)
Weight – Dual Mode Model	578 kg (1,271 lb)

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

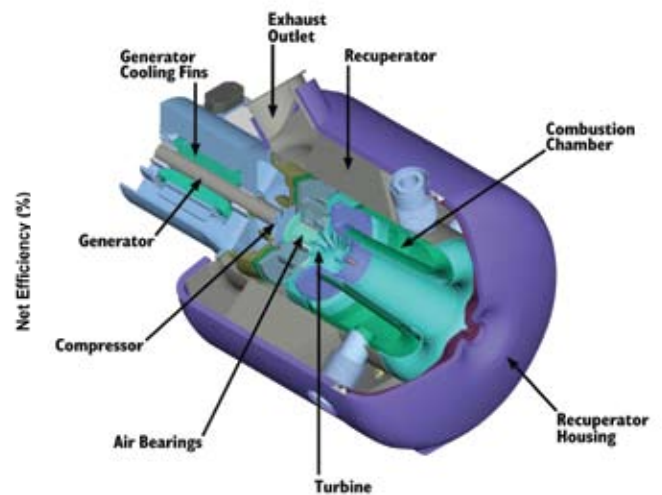
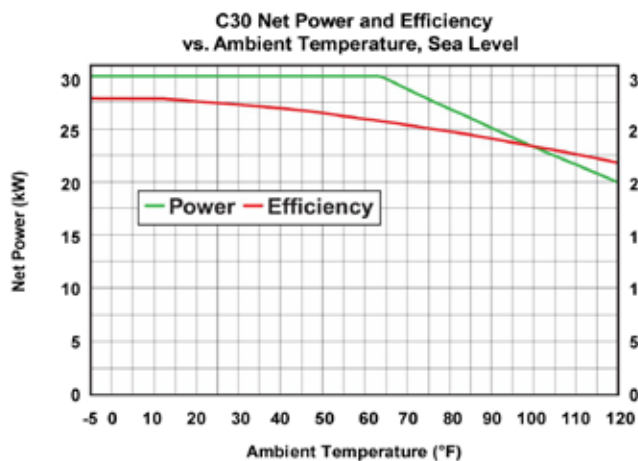
Vertical Clearance	0.61 m (24 in)
Horizontal Clearance	
Left & Right	0.76 m (30 in)
Front	0.93 m (37 in)
Rear	0.92 m (36 in)

## Sound Levels

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

## Certifications

- Certified to UL 2200 for stand alone natural gas operation (UL files AU2687, E209370)
- Materials Equipment Acceptance (MEA) approval for New York City
- 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) With linear load
  - (4) Exhaust emissions for standard Natural Gas at 39.4 MJ/Nm<sup>3</sup> (1,000 BTU/scf) (HHV)
  - (5) Approximate dimensions and weights
  - (6) Height dimensions are to the roof line. Exhaust outlet extends at least 7 in above the roof line
  - (7) Clearance requirements may increase due to local code considerations
- Specifications are not warranted and are subject to change without notice.*

