

## C30 & C30-CHP 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>

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

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

Natural Gas HHV	30.7–47.5 MJ/m <sup>3</sup> (825–1,275 BTU/scf)
Inlet Pressure	1.4–69 kPa gauge (0.2–10 psig)
Fuel Flow HHV	444 MJ/hr (420,000 BTU/hr)
Net Heat Rate LHV	14.4 MJ/kWh (13,700 BTU/kWh)

### Exhaust Characteristics<sup>(2)</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>	0.22 g/bhp-hr
Exhaust Gas Flow	0.31 kg/s
Exhaust Gas Temperature	275°C

## C30-CHP Heat Recovery

Integrated Heat Recovery Module Type Copper Core

Hot Water Heat Recovery	65kW (220,000 BTU/hr)
Total System Efficiency LHV	80%

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

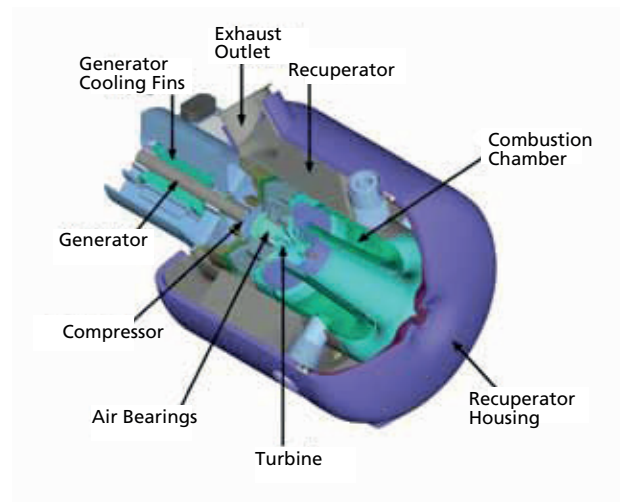
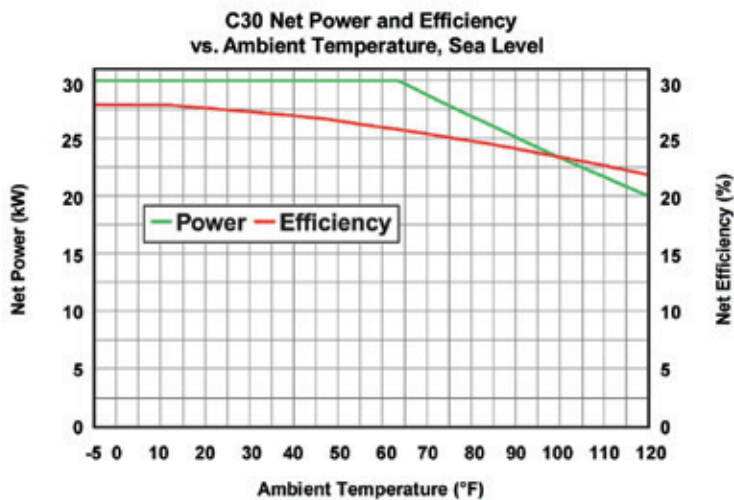
	C30	C30-CHP
Width x Depth x Height	0.76 x 1.5 x 1.8 m	0.76 x 1.5 x 2.2 m
Weight – Grid Connect Model	405 kg	490 kg
Weight – Dual Mode Model	578 kg	663 kg

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

Vertical Clearance	0.61 m
Horizontal Clearance	
Left & Right	0.76 m
Front	0.93 m
Rear	0.92 m

### Sound Levels

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



- (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 177mm 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.*

