C30 MicroTurbine Natural Gas

Capstone

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⁽¹⁾
- Small, modular design allows for easy, low-cost installation
- Reliable tens of millions of run hours and counting



C30 MicroTurbine

Electrical Performance ⁽²⁾	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	50/60 Hz, grid connect operation
	10-60 Hz, stand alone operation	10–60 Hz, stand alone operation
Maximum Output Current	46A, grid connect operation 46A, stand alone operation ⁽³⁾	46A, grid connect operation 46A, stand alone operation ⁽³⁾
Electrical Efficiency LHV	26%	25%
Fuel/Engine Characteristics ⁽²⁾	High Pressure	Onboard Gas Compressor Option
Natural Gas HHV	30.7–47.5 MJ/m³	30.7–47.5 MJ/m ³
	(825–1,275 BTU/scf)	(825–1,275 BTU/scf)
Inlet Pressure	379 – 414 kPa gauge (55 – 60 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)
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Net Heat Rate LHV Exhaust Characteristics(2)	13.8 MJ/kWh (13,100 BTU/kWh) High Pressure	14.4 MJ/kWh (13,700 BTU/kWh) Onboard Gas Compressor Option
Exhaust Characteristics ⁽²⁾	High Pressure	Onboard Gas Compressor Option
Exhaust Characteristics ⁽²⁾ NOx Emissions @ 15% O ₂ ⁽⁴⁾	High Pressure < 9 ppmvd (18 mg/m³)	Onboard Gas Compressor Option < 9 ppmvd (18 mg/m³)
Exhaust Characteristics ⁽²⁾ NOx Emissions @ 15% O ₂ ⁽⁴⁾ NOx / Electrical Output ⁽⁴⁾	High Pressure < 9 ppmvd (18 mg/m³) 0.22 g/bhp-hr (0.64 lb/MWhe)	Onboard Gas Compressor Option < 9 ppmvd (18 mg/m³) 0.22 g/bhp-hr (0.64 lb/MWhe)

Dimensions & Weight⁽⁵⁾⁽⁶⁾

Width x Depth x Height 0.76 x 1.5 x 1.8 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⁽⁷⁾

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)

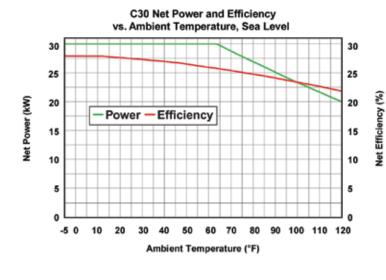
Sound Levels

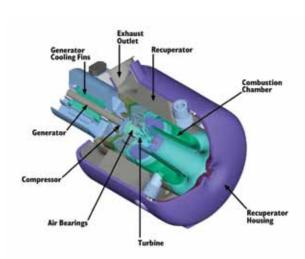
Acoustic Emissions at Full Load Power

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/Nm³ (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.

