

C30 MicroTurbine Oil & Gas



33% smaller than equivalent generators. Offers ultra-low emissions and reliable electrical generation from raw natural gas.

- Optimal UL Class 1, Division 2 or ATEX Class 1, Zone 2 certified
- Patented air bearing: No lubricating oil or coolant
- One moving part – minimal maintenance and downtime
- Ultra-low emissions
- Service network available worldwide
- Remote monitoring and diagnostic capabilities
- Multiple units easily synchronized
- Electrical protective relays mean no external switchgear required
- Small, modular design allows for easy, low-cost installation
- Reliable – tens of millions of run hours and counting
- Optional High Humidity protection available



C30 MicroTurbine



Offshore Hazardous Area

Electrical Performance⁽¹⁾

| | |
|---------------------------|---|
| Electrical Power Output | 30kW |
| Voltage | 400–480 VAC |
| Electrical Service | 3-Phase, 4 wire |
| Frequency | 10–60 Hz, stand alone operation |
| Maximum Output Current | 46A, stand alone operation ⁽²⁾ |
| Electrical Efficiency LHV | 26% |

Fuel/Engine Characteristics⁽¹⁾

| | Non-Hazardous Area Config. | Hazardous Area Config. |
|--------------------------------|--|--|
| Natural / Wellhead Gas HHV | 30.7–99.1 MJ/m ³ (825–2,516 BTU/scf) | 30.7–99.1 MJ/m ³ (825–2,516 BTU/scf) |
| H ₂ S Content | < 70, 000 ppmv ⁽³⁾ | < 70,000 ppmv |
| Inlet Pressure – HHV dependent | 310–379 kPa gauge (45–55 psig) | 310–379 kPa gauge (45–55 psig) |
| Fuel Flow HHV | 457 MJ/hr (433,000 BTU/hr) | 455 MJ/hr (432,000 BTU/hr) |
| Net Heat Rate LHV | 13.8 MJ/kWh (13,100 BTU/kWh) | 13.8 MJ/kWh (13,100 BTU/kWh) |

Exhaust Characteristics⁽¹⁾

| | Raw Natural Gas | Hazardous Area Config. |
|---|-----------------------------------|-----------------------------------|
| NOx Emissions @ 15% O ₂ ⁽⁴⁾ | < 9 ppmvd (18 mg/m ³) | < 9 ppmvd (18 mg/m ³) |
| NOx / Electrical Output ⁽⁴⁾ | 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 (0.68 lbm/s) | 0.32 kg/s (0.70 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⁽⁵⁾⁽⁶⁾

| | Raw Natural Gas | Hazardous Area Config. |
|------------------------|---|--|
| Width x Depth x Height | 0.76 x 1.5 x 1.8 m (30 x 60 x 70 in) | 0.87 x 2.9 x 2.2 m (35 x 112 x 85 in) |
| Weight | 578 kg (1,271 lb) | 1141 kg (2,511 lb) |

Minimum Clearance Requirements⁽⁵⁾

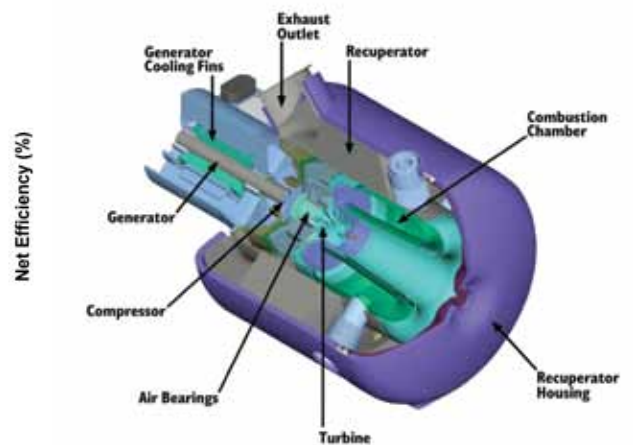
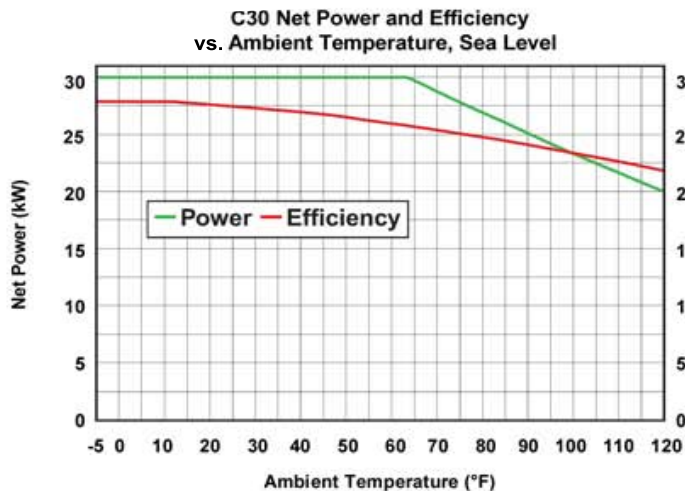
| | Raw Natural Gas | Hazardous Area Config. |
|----------------------|-----------------|------------------------|
| Vertical Clearance | 0.61 m (24 in) | 0.61 m (24 in) |
| Horizontal Clearance | | |
| Left & Right | 0.76 m (30 in) | 0.89 m (35 in) |
| Front | 0.93 m (37 in) | 1.1 m (44 in) |
| Rear | 0.92 m (36 in) | 0.92 m (36 in) |

Sound Levels

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

Certifications

- Hazardous Area configurations certified to UL 2200 and NFPA 496
- Hazardous Area configurations certified for hazardous locations (UL file E240758) for standard natural gas
- Models available with optional equipment for CE Marking
- Hazardous Area configurations available with ATEX



(1) Nominal full power performance at ISO conditions: 59°F, 14.696 psia, 60% RH
 (2) With linear load
 (3) Varies with system configuration
 (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 roof line
 (7) Clearance requirements may increase due to local code considerations
 Specifications are not warranted and are subject to change without notice.

