

# C65 & C65 ICHP MicroTurbine Natural Gas



Achieve ultra-low emissions and reliable electrical/thermal generation 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



C65 MicroTurbine

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

Electrical Power Output	65kW
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	100A, grid connect operation 100A, stand alone operation <sup>(3)</sup>
Electrical Efficiency LHV	29%



C65 ICHP MicroTurbine

## 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 <sup>(4)</sup>	517–552 kPa gauge (75–80 psig)
Fuel Flow HHV	888 MJ/hr (842,000 BTU/hr)
Net Heat Rate LHV	12.4 MJ/kWh (11,800 BTU/kWh)

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

NOx Emissions at 15% O <sub>2</sub> <sup>(5)</sup>	< 9 ppmvd (19 mg/m <sup>3</sup> )
NOx / Electrical Output <sup>(5)</sup>	0.16 g/bhp-hr (0.46 lb/MWhe)
Exhaust Gas Flow	0.49 kg/s (1.08 lbm/s)
Exhaust Gas Temperature	309°C (588°F)

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

## C65 ICHP Heat Recovery<sup>(6)</sup>

Integrated Heat Recovery Module Type	Copper Core	Stainless Steel Core
Hot Water Heat Recovery	112kW (0.38 MMBTU/hr)	70kW (0.24 MMBTU/hr)

## Dimensions & Weight<sup>(7)</sup>

	C65	C65 ICHP
Width x Depth <sup>(8)</sup> x Height <sup>(9)</sup>	0.76 x 2.0 x 1.9 m (30 x 77 x 75 in)	0.76 x 2.2 x 2.36 m (30 x 87 x 93 in)
Weight – Grid Connect Model	758 kg (1,671 lb)	1000 kg (2,200 lb)
Weight – Dual Mode Model	1121 kg (2,471 lb)	1364 kg (3,000 lb)

## Minimum Clearance Requirements<sup>(10)</sup>

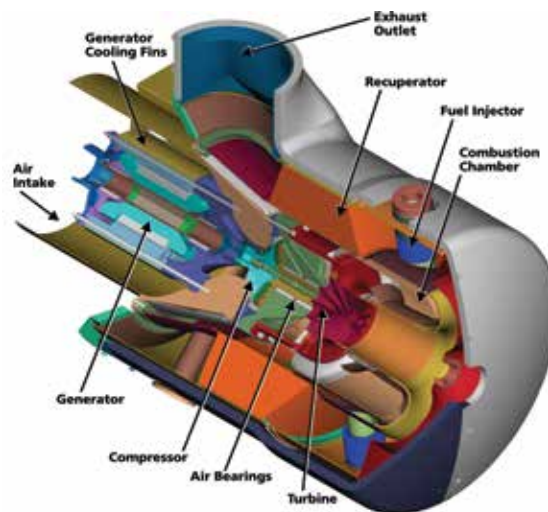
	C65	C65 ICHP
Horizontal Clearance		
Left & Right	0.76 m (30 in)	0.76 m (30 in)
Front <sup>(11)</sup>	1.65 m (65 in)	1.65 m (65 in)
Rear	0.91 m (36 in)	0.76 m (30 in)

## Sound Levels

	C65	C65 ICHP
Acoustic Emissions at Full Load Power <sup>(12)</sup>		
Nominal at 10 m (33 ft)	70 dBA	65 dBA

## Certifications

- Certified to UL 2200 and UL 1741 for natural gas operation (UL files AU2687, E209370)
- Complies with IEEE 1547 and meets statewide utility interconnection requirements for California Rule 21 and the New York State Public Service Commission
- 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) Inlet pressure for standard natural gas at 39.4 MJ/Nm<sup>3</sup> (1,000 BTU/scf) (HHV)  
 (5) Exhaust emissions for standard natural gas at 39.4 MJ/Nm<sup>3</sup> (1,000 BTU/scf) (HHV)  
 (6) Heat recovery for water inlet temperature of 60°C (140°F) and flow rate of 2.5 l/s (40 GPM)  
 (7) Approximate dimensions and weights  
 (8) Depth includes 10 inch extension for the heat recovery module rain hood on ICHP versions  
 (9) Height dimensions are to the roof line. Exhaust outlet extends at least 7 inches above the roof line  
 (10) Clearance requirements may increase due to local code considerations  
 (11) Dual Mode MicroTurbine configuration for Battery Removal clearance  
 (12) The optional acoustic inlet hood kit can reduce acoustic emissions at the front of the MicroTurbine by up to 5 dBA  
 Specifications are not warranted and are subject to change without notice.

