Tecopower™

The pioneer in CHP

CM-60 & CM-75 *Ultera*

Ultra Low Emissions Combined Heat and Power Modules

Energy efficiency re-imagined.
Powered by clean, plentiful natural gas.
Tecogen, the pioneer in modular CHP.

Exceptional Cost Savings

Tecogen CHP products are among the most efficient ways to provide electricity and heat to a building. Fueled by plentiful and inexpensive natural gas, a proven internal combustion engine provides on-site generation of electricity while its high-grade waste heat is recovered and purposefully used to serve the building's hot water needs. This boost in overall efficiency translates into immediate dollar savings of up to 50% for building owners.

Clean Energy

Extraordinary efficiency translates into less fuel consumption for the same amount of electrical and thermal energy produced. This results in a considerable reduction in greenhouse gas (GHG) emissions of more than 40%. Also, with Tecogen's patented *Ultera* system, pollutant emissions are nearly eliminated, meeting the toughest air emission standards in the United States including in California and the Northeast. In New Jersey, for instance, the *Ultera* system is air permit exempt. With Ultera, the resulting NOx/CO emissions levels are comparable to, or lower than, those from less efficient gas-consuming generation technologies, such as microturbines and fuel cells.

Unsurpassed Quality and Safety

TECOGEN™ modules are ETL-Listed for product safety certification and have been type tested to comply with the interconnection standards of IEEE P1547/D07 and NYSIR, and are certified by UL as Non-Islanding. All units are factory run-tested at full-load prior to shipment to ensure superior quality.

Simplified Installation and Interconnection

Modules come fully pre-packaged from the factory, including engine, generator, oil/ jacket/ exhaust heat recovery, controls, electrical switchgear, emissions controls, and modem for remote monitoring and data-logging. This allows for standardization and minimizes installation cost and complexity in the field. Also, the comprehensive third-party (ETL/IEEE/ NYSIR/UL) certifications provide streamlined interconnection permitting with the local electric utility.

Tecogen is a leading next-generation manufacturer of natural-gas-fueled, engine-driven, combined heat and power (CHP) products that aim to reduce energy costs, reduce greenhouse gas emissions, and alleviate congestion on the national power grid. The installed base of more than 2,000 units is supported by a unique and established network of factory engineering and field sales and service personnel located in California, the Midwest and the Northeast.

Ultera EMISSION CONTROL

INTERTEK ETL LISTED US

CA Rule 21 - Certified
NJDEP - Air Permit Exempt
NYSIR - Certified

Tecogen Inc. • 45 First Avenue, Waltham, MA 02451 • 781-466-6400 • 781-466-6466 (fax) • www.tecogen.com

Induction-Based Cogeneration

Specifications: [1]

Engine	*Proven Low-Emission Natural Gas V-8 Engine, 1820 rpm*
Generator	*Induction-Based Generator*
Controls	*TecoNet™ Microprocessor-Based System, Fully Automatic, Fault Monitoring, Anti-Islanding, Lead/Lag Multiple Unit Control, Modbus/ BACnet Networking & Cloud-Based Remote Communication*

Model	CM-60 Ultera Low Emissions	CM-75 Ultera Low Emissions
Electrical Output (kW)	60 kW	75 kW
Thermal Output (Btu/hr)	407,000	450,000
Gas Input	743 scfh	879 scfh
Electrical Efficiency **@ LHV of 905 Btu/scf** **@ HHV of 1020 Btu/scf**	 30.4% 27.0%	 32.1% 28.5%
Overall Efficiency **@ LHV of 905 Btu/scf** **@ HHV of 1020 Btu/scf**	 90.9% 80.7%	 88.8% 78.8%
Required Gas Pressure	4-12" wc	
Design Hot Water Flow	22 gpm (24 gpm max)	
Air Emissions (SCAQMD & NJ DEP Compliant)[2] • **NOx** • **CO** • **VOC**	 < 0.07 lb/MWh < 0.2 lb/MWh < 0.1 lb/MWh	
Maximum Leaving Water Temperature	230° F	
Maximum Entering Water Temperature	180° F	
Electrical Service	208V / 230V / 460V, 3 PH, 3-wire	
Acoustic Level (indoor and outdoor)	65 dBa @ 20'	
Dimensions (indoor / outdoor)	7' 2"L x 3' 8"W x 3' 10"H / 7' 2"L x 4' 1" W x 6' 3"H	
Weight (indoor / outdoor)	3000 lbs / 3750 lbs	
IEEE P1547/D07 - Certified by Intertek Testing Services to be in compliance with this Draft Standard for Interconnecting Distributed Resources with Electric Power Systems.		
California Rule 21 - Certified to meet the Type Testing and Production Testing requirements for California Rule 21. (www.energy.ca.gov./distgen/interconnection/certification.html)		
NYSIR—Accepted as Type Tested and Approved Equipment by the New York State Public Service Commission Standard Interconnect Requirements. (www.dps.ny.gov/distgen.htm)		

[1] *All specifications are +/- 5% and are subject to change without notice.*
[2] *Emission limits include 60% system efficiency (HHV) credit for Distributed Generation as per CARB 2007.*

Performance data is valid up to 100 °F ambient temperature.

Indoor Enclosure


Outdoor Enclosure Option

Tecogen products are covered under one or more of the following U.S. patents: 8,578,704 7,239,034 7,243,017 and other patents pending

Tecogen®
Advanced Modular CHP Systems

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