COMBINED HEAT AND POWER / COGENERATION SYSTEMS



Our packaged combined heat and power, also known as CHP or cogeneration, systems range from 60 to 800 kW and can be installed in or just outside your boiler room. We use only the most reliable clean energy technology on the market today to produce high-quality, clean electricity and hot water. The hot water produced is available to supplement your existing boilers for domestic hot water applications, space heating, laundries, and heated swimming pools. Using this clean energy technology, we supply energy with efficiencies near 90%, compared to about 35% for traditional electric utilities and the 65% efficiency for typical boilers, when adjusted seasonally.

Since this clean energy technology offers higher efficiencies, the result is lower energy costs for you and reduced greenhouse gas emissions for the environment. And because it is deployable today with a proven record of reliability, it is a practical, "green" energy solution, providing superior comfort.

FEATURES AND BENEFITS

- → Up to 100 kW continuous, 125 kW peaking
- → Standardized interconnection
- → Black-start grid-independent operation
- → Microgrid compatible with licensed CERTS power-balancing control software
- → Premium-quality wave form, voltage and power factor for special applications (e.g., computer server farms or precision instrumentation)
- → Power boost for demand-side response
- → Enhanced efficiency from variable speed operation
- → Simplified inter-unit controls for either mode of operation (parallel or standby)
- → Remote Monitoring and Control System permits remote real-time monitoring, data acquisition, and system control by telephone or Ethernet
- → ETL Listed labeled for compliance with UL 1741 - utility interactive; inverters, converters, controllers and interconnection system equipment for use with distributed energy resources



A CHP system is a practical, "green" energy solution that provides a good ROI.

ON-SITE ENERGY PRODUCTS

American DG Energy offers a variety of clean energy systems, including combined heat and power, chiller cooling systems, and heat pumps to provide energy costs savings along with environmental and economic benefits to our customers. With an installed base of thousands of systems, these clean energy technologies, deployed at sites across the country for over 20 years, provide a "green" energy solution that is proven, reliable, and flexible to fit the needs of your business.

ON-SITE UTILITY

American DG Energy sells the energy produced from an on-site energy system to an individual property as an alternative to the outright sale of energy equipment. On-Site Utility customers only pay for the energy produced by the system and receive a guaranteed discount rate on the price of the energy. All system capital, installation, operating expenses, and support are paid for and handled by American DG Energy.

CONTACT US TODAY

Set up a site assessment and start your energy cost savings.

Phone: 781.522.6000 Fax: 781.522.6050

Email: info@americandg.com

American DG Energy Inc. 45 First Avenue Waltham, MA 02451 www.americandg.com

POWER TO PROSPER

SPECIFICATIONS

	CM-75	InVerde 100
Electric Output	75 kW 208 VAC / 3PH / 60 Hz	100 kW continuous / 125 kW peaking 480 VAC / 3 PH / 60 Hz
Standalone Electric Capacity	n/a	125 kVA
Thermal Output Engine Generator/Power Electronics	511,000 Btu/hr @ 230°F max	700,000 Btu/hr @ 230°F max 27,000 Btu/hr @ 129°F max
System Efficiency © LHV of 905 Btu/scf © HHV of 1020 Btu/scf	91.4% 81.1%	92.9% 82.4%
Gas Input	927 scfh	1238 scfh / 1625 scfh peaking
Required Gas Pressure	10" - 28" wc	10" - 28" wc
Hot Water -Maximum Leaving Water Temperature	20 gpm - 25 gpm 230°F	30 gpm 230 °F
Weight	3,000 lbs	4,500 lbs
Dimensions	7'2"L x 3'8"W x 3'10"H	7'4"L x 4'W x 5'.9" H
Engine	Proven low-emission natural-gas V-8 Engine, 454 cid, 1000-3000 rpm	Proven low-emission natural-gas V-8 Engine, 454 cid, 1000-3000 rpm
Generator	Air-cooled induction generator	Water-cooled permanent magnet generator
Inverter	n/a	Customized power electronics with patented topology for variable speed and standby operation

All specifications are +/- 5% and are subject to change without notice. Peaking capacity is available for 100 hours per year only when grid connected. Includes engine heat recovery only (not generator/power electronics heat). Above performance data is valid up to $100^\circ\mathrm{F}$ ambient temperature. Lower emissions options are available with the use of additional catalyst material

