

THERE'S MORE THAN ONE REASON TO CHOOSE THE WHISPERGEN



Clean and Efficient

Both in design and performance, which means lower energy costs and with minimal impact on the environment.



Reliable

Low maintenance design.



Self Managing

Features integrated microprocessor controlled system, which eliminates the need for constant user interaction.



Effective Heat Output:

Over 12kW Thermal output



Compact

The size and shape of an average domestic dishwasher.



Quiet

The low vibration and external combustion features of the WhisperGen Stirling engine result in noise levels comparable to (and in many cases much quieter than) other household appliances.



Savings:

Real savings for the customer through the production of their own electricity to supplement grid electricity supply.



Decentralization

Reduces the need for large central power stations and their associated transmission network.



Economic benefits

Helping to avoid peak-load costs when the network is overloaded.



Quick growth

Allows for rapid introduction of new generation capacity

POWER FROM YOUR HEATING

WHISPERGEN

- Heat and electricity for your home
- Environmentally friendly
- Saves you money



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"Using a WhisperGen® microCHP Unit could reduce your carbon dioxide emissions by up 1 tonne per year and reduce your electricity bills by around 25% per year."



efficient home energy, s.l.

HOT WATER AND ELECTRICITY AT THE SAME TIME

YOUR PERSONAL POWER STATION

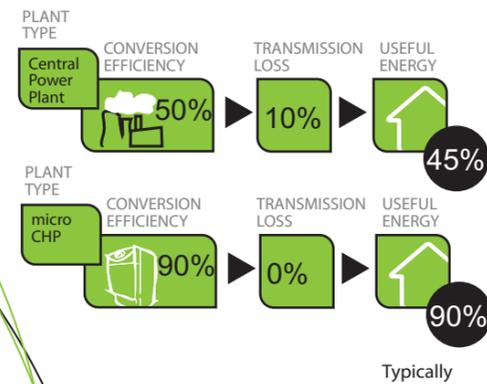
The WhisperGen is Micro Combined Heat and Power technology that is creating a quiet revolution in energy generation.

It is an effective and clean energy generation system which is poised to replace existing home boilers and, not only can it supply all of the household's water demands (with domestic hot water and central heating), but at the same time it generates electricity which can either be used in the home or supplied back to the grid.

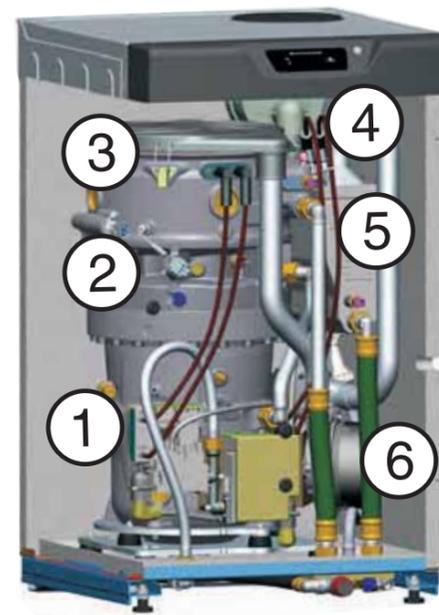
HOW DOES A WHISPERGEN® MICROCHP UNIT WORK?

The WhisperGen® microCHP unit provides an alternative to a household gas boiler. Its enclosure is about the size and shape of a dishwasher, but it contains all of the equipment required to **produce hot water and generate electricity** for use in the home. It is the result of more than fifteen years of research and development. The basic principles are very simple:

- The unit contains a gas powered engine called a Stirling engine.
- This is connected to an electrical generator that produces electricity whenever the engine runs.
- The water that is used to cool the engine heats up during that process. This hot water is circulated within the central heating system.



WHISPERGEN™



1. An electrical generator that provides 230 Volt AC power.
2. A Stirling engine that provides the motive power for the generator.
3. A gas burner assembly that provides the heat necessary for the operation of the Stirling engine.
4. An auxiliary burner that produces additional heat at times of high demand.
5. A heat exchanger that recovers heat from the hot gases produced by the burner.
6. Two fans that provide combustion air for the burners and helps pass the waste gases from the combustion process to the atmosphere via the flue.

TECHNICAL SPECIFICATIONS

General Details

Engine: 4 cylinder double-acting Stirling cycle
Main Burner: Premix surface burner
Auxiliary Burner: premix surface burner
Generator: 4 pole single phase induction motor
Duty Cycle: 1 - 24 hour cycle
Installation Type: C13, C33, C63
Electrical Supply: 230 Vac 50 Hz (Nominal grid voltage)

Electrical Output

Nominal Mode: up to 1000 W

Thermal Output

Minimum: 5.5 kW
Nominal Mode: up to 7.0 kW
Maximum: typically 13.0 - 14.0 kW

Power Consumption (net)

Standby: 9 W
Generating: 60 W

Fuel

Type: 2H-2nd family natural gas
Supply Pressure : 17...25 mbar (20 mbar nominal)
Supply Conditions: I2H-G20-20 mbar, I2L-G25-25 mbar, I1E-G20-20 mbar

Fuel Consumption

Maximum Burner Firing Rate: 1.55 m³/ hour

Central Heating System

Flow rate (nominal): 8.5 to 15 l/min.
Type : Sealed pressurised or open vented
Max system pressure : PMS = Class 2; 3.0 bar maximum
System Flow Temperature: maximum 85°C

Dimensions

Width x Depth x Height : 491(W) x 563(D) x 838(H)
Weight (dry) : 148 kg