The **Optimus Gas Absorption Heat Pump** captures low-grade energy from surrounding air and in combination with a gas-fired condensing burner provides LTHW at exceptional efficiencies. Up to 150% can be achieved with a flow rate at 50°C and an ambient temperature of 7°C. The unit is suitable for external installation only, and will operate continuously, even in defrost mode. It has low electrical input and uses a water/ammonia solution, which has a GWP and ODP of zero – making the product particularly environmentally friendly. LTHW can be supplied at up to 65°C for heating applications and up to 70°C for domestic hot water.

Specifications shall be as follows:-
- Gross nominal input of 25.2kW (22.7kW net)
- Gross nominal output of 38.3kW at 50°C flow and 7°C ambient air temperature
- CE Certified with a Gas Usage Efficiency of 152% at 50°C flow and 7°C ambient air temperature
- NOx emissions of no more than 44mg/kWh at 0% O₂
- Sound pressure at 5mtr <61db
- Global warming potential (GWP) <1
- Ozone depletion potential (ODP) <1

Ancillaries (delete as appropriate)
- Primary Buffer Vessel
- HSV Thermal Store
- External temperature sensor
- Single unit Primary pump 2m head
- Single unit Primary pump 5m head
- LCGHP cascade control
- LCGHP DHW control
- Lochinvar Boiler Interface
- Anti-Vibration mountings single unit