

Geothermal Heat Pumps

Geothermal Heat Pump Technology

Geothermal (ground-source) heat pumps rely on the fact that the earth stays warm throughout the winter. This large amount of low-temperature heat is extracted with either a long pipe buried two metres below the surface or directly from well water, then converted in the heat pump into a small amount of high-temperature heat suitable for heating a house. This heat transfers to the water that travels through the central heating system, warming the home.

Two metres below the surface, the earth maintains a constant temperature, which means constant performance in any weather. Because the pipes are hidden two metres underground, the system is visually unobtrusive and the land above the pipes can be used. Water is used in the ground loop pipes (which have a 50-year life expectancy), so there is no danger of refrigerants leaking into the ground.



- Low running costs; low maintenance
- No defrost mode means they never have to stop heating
- No visual impact on outside of house; silent operation
- Renewable energy available 24/7 from the greatest solar collector—the earth!
- Suitable for radiators and underfloor systems

Available Models

MasterTherm Geothermal heat pumps are commercial quality units packed with innovation that allows great flexibility of application as well as looking sharp. The inverter compressors enable better load matching and quiet running due to base isolated mounting. Desuperheaters and Subcooler options are available as well as passive or full cooling functions. Fully connectivity via iOS or Android enables online control and diagnostic which is ideal for remote locations.

Specification Details

- COP average over 4.5
- Variable output inverter compressor
- Built in circulation pumps for primary and secondary circuits
- Water/Water version on request
- Internet HP control master option
- Wide variety model options available
- Capacity up to 60kW available
- System specifying advisable with all geothermal heat pumps

Product Code	Style	Output
HPMTAQ4517	MasterTherm Geothermal Heat Pump	14kW
HPMTAQ6011	MasterTherm Geothermal Heat Pump	20kW

Additional styles and sizes available by indent.
Contact us for further details.



— The latest model of MasterTherm Geothermal heat pump

Certification

Central Heating New Zealand is certified with the International Ground Source Heat Pump Association for design and installation and has more than 80 geothermal heating systems installed and operated across New Zealand.

For more information, please request our geothermal heating guide.

