

ASTON SERIES OUTDOOR PACKAGED UNIT

HEATING | COOLING | HOT WATER



WHAT IS GEOTHERMAL?

Geothermal units use the solar energy stored just below our feet to provide heating, air conditioning and hot water. The earth acts as a giant solar panel absorbing roughly half of the sun's heat energy. A series of pipes called a "loop" (see next page for more) is buried just below the frost line to tap into that stored energy. In the winter, heat is brought

in through the loop, concentrated, and delivered throughout your home. During summer, the excess heat in your home is removed and delivered back to the earth completing the cycle. Because geothermal units use the earth's natural heat, they are among the most efficient and comfortable heating and cooling technologies currently available.



GEOSTAR BENEFITS

Thanks to the unique way geothermal units operate, they provide a host of exciting benefits to you and our environment.

AMAZING ENERGY EFFICIENCY: Geothermal heat pumps don't create energy, they simply move it. Only a small amount of electricity is used to circulate heat to and from your home. This allows GeoStar units to provide \$5 of heating for every \$1 of electricity used, while current "high-efficiency" fossil fuel furnaces provide only 98c. Our units are far more efficient than any conventional furnace!



COST EFFECTIVENESS: Though geothermal systems can be more expensive to purchase up front, the cost difference will be returned through drastically lower energy bills. Most GeoStar owners see savings up to 70% on their utility bills!

GREATER COMFORT: A GeoStar unit runs only at the level needed by using a variable speed motor. It'll slowly ramp up to speed rather than "roaring" to life like a traditional unit—resulting in even, consistent comfort. You won't experience the large temperature fluctuations associated with other heating and cooling solutions.

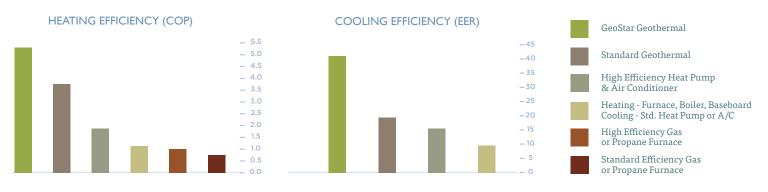
QUIET: With our unit, there's no noisy outdoor equipment to disturb the peace or clutter your yard. GeoStar units are so quiet, some homeowners have reported checking the unit to see if it's even running!

LONGER LIFE AND RELIABILITY: Because GeoStar units don't require any outdoor equipment, they are protected from the rain, snow, environmental contaminants and abuse that hinders the efficiency of traditional air conditioners and heat pumps.

ENVIRONMENTALLY FRIENDLY: Geothermal units don't burn any fossil fuels or create carbon monoxide. This reduces our dependence on foreign oil while it works to reduce greenhouse gas emissions. One GeoStar geothermal unit is the environmental equivalent of taking two cars off the road forever. In fact, the Environmental Protection Agency (EPA) says geothermal heat pumps are the most environmentally friendly and cost effective way to condition our homes.

COMPARE THE PERFORMANCE

A GeoStar unit can reduce your annual costs for heating, cooling and hot water by as much as 70% per year. No other gas furnace, air conditioner or heat pump comes close to GeoStar's efficiency. With continuous and dramatic increases in the cost of fossil fuels like natural gas, propane and fuel oil, the savings possibilities are even greater in the future. Your GeoStar dealer can use software modeling tools to estimate the heating and cooling costs for your home based on square footage, construction style, and climate.



GEOTHERMAL LOOP TYPES:

There are four main loop types used in the geothermal industry today. Your GeoStar dealer can provide you with guidance and advice for your specific situation.



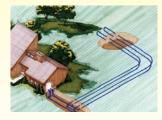
VERTICAL LOOP

Used when space is limited. Holes are bored approximately 125 to 250 ft. deep using a drilling rig. A pair of polyethylene pipes with a u-bend fitting is inserted into the holes. A typical home requires three to five bores with roughly a 15-foot separation between the holes.



POND LOOP

If an adequately sized body of water is close to your home, a pond loop can be installed. A series of closed loops are coiled and sunk to the bottom of the pond or lake. A 1/2 acre, 8-foot-deep pond is usually sufficient for the average home.



HORIZONTAL LOOP

Used where adequate land is available Horizontal loops involve one or more trenches dug using a backhoe or chain trencher. Polyethylene pipes are inserted, and the trenches are backfilled. A typical home requires 1/4 to 3/4 of an acre for the trenches.



OPEN LOOP

An open loop is used where there is an abundant supply of quality well water. The well must have enough capacity to provide adequate flow for both domestic use and the GeoStar unit. GeoStar units require 3 - 10 GPM, depending on size.



Homeowners who install an ENERGY STAR® rated geothermal system in the U.S. are eligible for a 26% federal tax credit. The 26% credit will last through 2022 and can be claimed on equipment and installation costs with no upper limit. The credit is scheduled to decrease to 22% in 2023, so act now for the most savings!

ASTON SERIES TECHNOLOGY

GeoStar products are designed to heat and cool while saving you money and protecting our environment. The Aston Series utilizes environmentally safe R-410A refrigerant and includes scroll compressors—the most durable and efficient compressor technology. Dual capacity operation provides the finest in comfort and energy savings. And with the Aurora family of controls, you'll have two-way communication, energy monitoring, and one of the most efficient dual stage geothermal heating and cooling units to date.



ASTON SERIES FEATURES

COMPRESSOR: For superb efficiency and reliability dual capacity units utilize Scroll UltraTech™ compressors. All compressors are double isolation mounted for extra quiet operation.

CONTROLS: Powerful Aurora controls offer two-way communication between components, industry-leading operating logic, and thorough troubleshooting capabilities. An expansion board adds true energy monitoring capabilities and compatibility with Symphony and our IntelliZone2 zoning system.

BLOWER MOTOR: A variable speed ECM motor runs at only the speed needed for maximum efficiency and savings.

INTERNAL LOOP PUMPS: The flow center is conveniently mounted within the cabinet, eliminating the need for any indoor loop piping. The loop pipes enter the unit through an opening in the bottom or side panel.

ALUMINUM AIR COIL: Aston Series units feature aluminum air coils for durability and extended system life. Formicary corrosion is now a thing of the past.

CABINET: The cabinet comes standard with a professional grade finish for long-lasting beauty and protection. The system is fully insulated for quiet operation with cleanable foil-backed insulation and is available in five dual capacity sizes (2-6 ton).

THERMASHIELD™: Our exclusive coaxial heat exchanger coating protects against condensation for temperatures below 50°F, extending its life.

INTELLISTART: This optional soft starter reduces start-up amperage by up to 60% of normal draw to reduce noise, eliminate light flicker, and increase compressor life.

R-410A: All Aston Series units utilize environmentally friendly R-410A refrigerant.









Brought to you by:

AHRI / ISO / ASHRAE PERFORMANCE RATINGS (13256-1)

Model Size		Closed Loop		Open Loop	
		Cooling (EER)	Heating (COP)	Cooling (EER)	Heating (COP)
026	Full Load	17.9	3.9	22.5	4.7
	Part Load	25.1	4.4	28.7	4.8
038	Full Load	19.7	4.1	24.4	4.8
	Part Load	27.6	4.6	31.7	5.0
049	Full Load	19.0	4.0	24.3	4.5
	Part Load	27.1	4.3	32.1	4.6
064	Full Load	18.2	3.8	23.1	4.5
	Part Load	24.7	4.2	30	4.8
072	Full Load	16.6	3.7	21.5	4.3
	Part Load	21.8	3.9	27.3	4.2