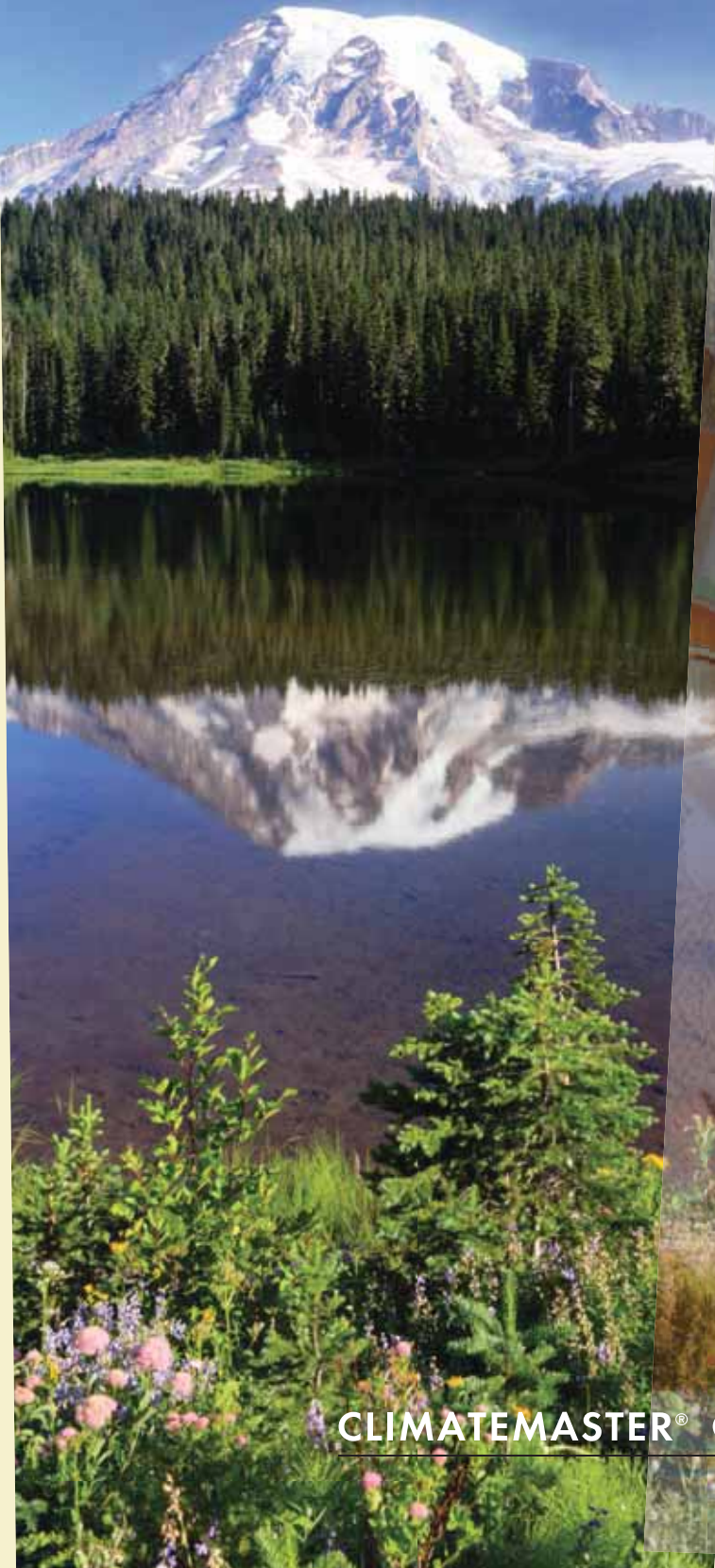


TRANQUILITY® WATER-TO-WATER SERIES



CLIMATEMASTER® GEOTHERMAL HEAT PUMP SYSTEMS  
SMART | RESPONSIBLE | COMFORTABLE





## NATURALLY CONTROL CLIMATE AND COST

Wherever you live, the temperature beneath your home remains constant regardless of the season. ClimateMaster®

Geothermal Heat Pump Systems harness the stable under-



ground temperature to provide heating, cooling, and hot water at remarkably high efficiencies. So high, in

fact, that energy use can be cut by up to 80%. As the world's largest and most progressive leader in clean, renewable geothermal technology, ClimateMaster leads the way with its award-winning Tranquility® Series geothermal heat pumps.

# HARNESS CLEAN, RENEWABLE ENERGY STORED IN THE EARTH

Nearly half the solar energy our planet receives is absorbed by the ground.

As a result, below the surface the earth remains a constant moderate temperature year-round. This provides an ideal source for heating and cooling your home. Geothermal systems use a sealed underground loop piping filled with circulating water and an ultra high-efficiency Tranquility® heat pump to exchange heat between your home and the earth.

In the winter, the earth is your source of heat.

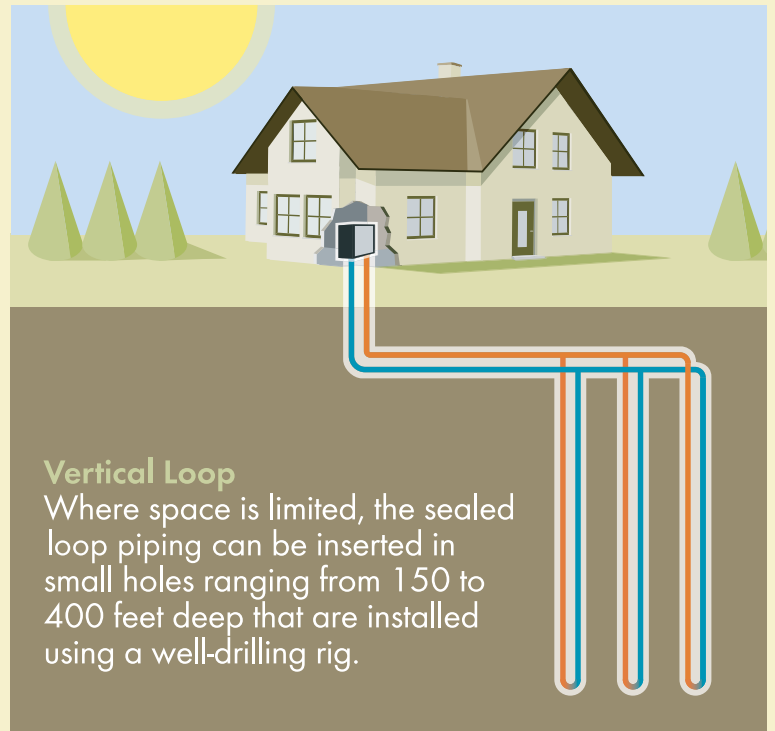
Water circulating in the loop piping absorbs heat from the earth and carries it to the heat pump, where it is concentrated and sent as warm, comfortable air throughout your home.

In the summer, the earth is your source of cooling.

The heat pump absorbs heat from the air in your home and transfers it to water circulating in the loop piping where it is absorbed by the earth. This provides cool, dehumidified and comfortable air throughout your home.

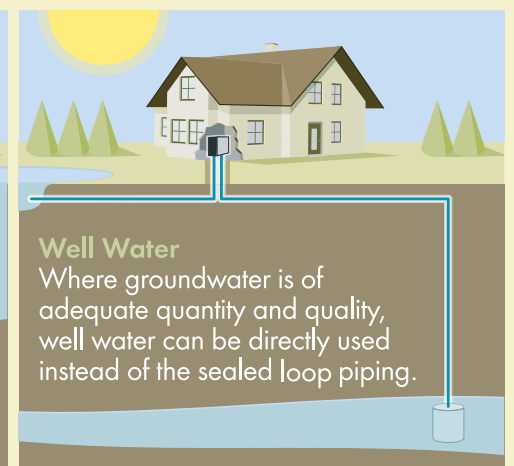
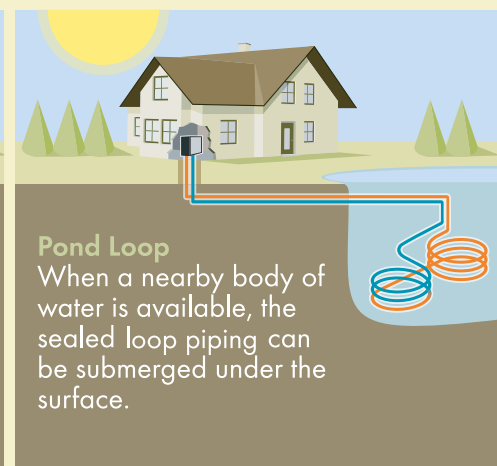
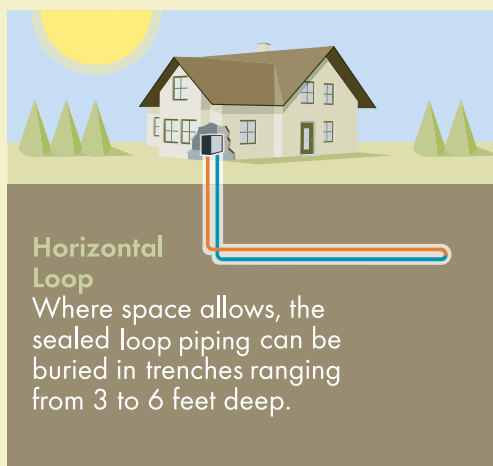
In all seasons, the system may provide nearly free hot water whenever it is in use.

*ClimateMaster systems work year-round, in all climates, providing heating, cooling and hot water.*



Flexible to install.

Your geothermal loop is custom designed to fit your exact needs and available space.







**The Tranquility® Water-to-Water Unit**  
The unit can fit in a basement (as shown), utility closet, or garage.

# COST SAVINGS

## Savings and Flexibility.

The ClimateMaster Tranquility® Water-to-Water series brings together the advantages of radiant floor heating with the benefits of geothermal technology, providing unmatched comfort and savings. The Tranquility® Water-to-Water series has installation options that can be used for snow/ice melt, spa, pool water heating, and free hot water. Water-to-water units can also provide chilled water to small fan coil units for zoned forced-air cooling if desired. The water-to-water series is available in a wide range of unit sizes for most any installation.

*Geothermal technology uses the stability of underground temperatures to maximize efficiency.*

## Pure Comfort.

A radiant floor heating system uses a series of pipes underneath the floor to heat a room. The entire surface of the floor radiates heat evenly, warming the feet and body first, making you feel warm. You may even set your thermostat several degrees lower as the floor temperature might be 85°F while the air temperature in the room is only 65°F. This saves you money, without sacrificing comfort.

## Look Good.

One of the greatest advantages of radiant floor heating is the system is “invisible.” There are no registers, baseboard units, or radiators to obstruct furniture arrangements and interior design plans. There are no restrictions on where you can hang pictures and other décor in a room, making the most effective use of your wall and floor space.

## Low Utility Bills.

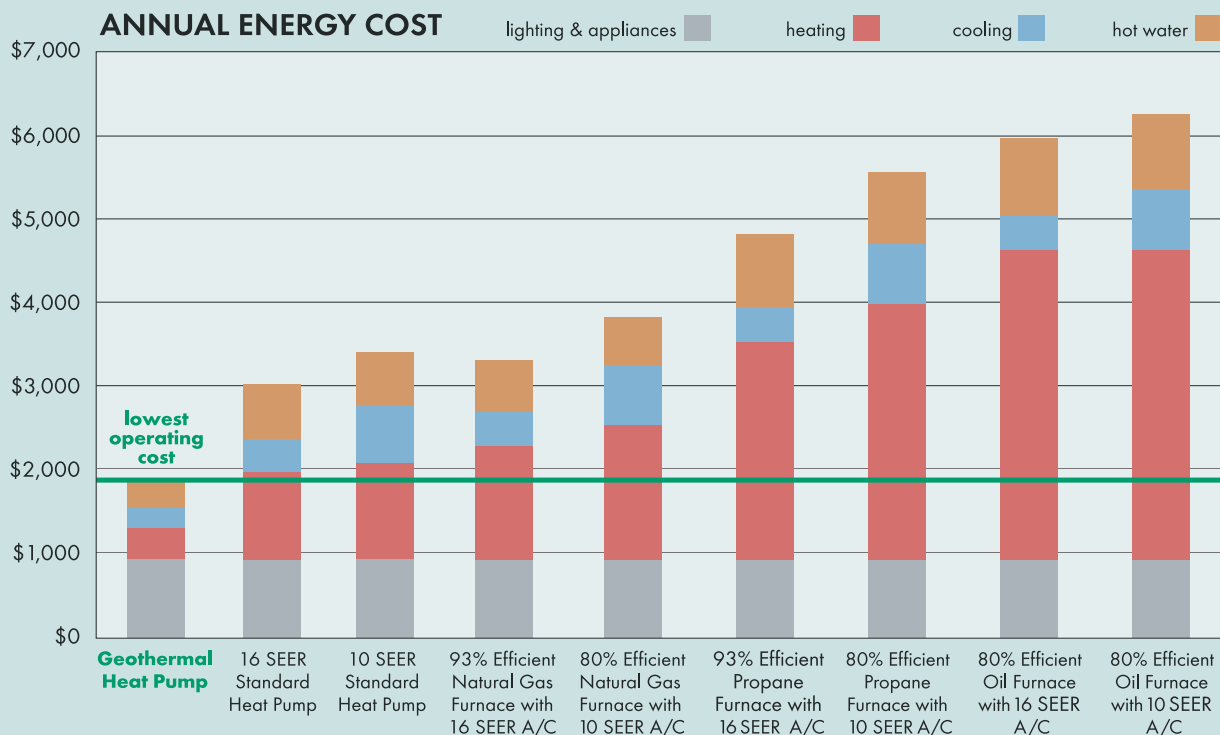
The Tranquility® Water-to-Water Series provides you with the highest energy efficiency of any space conditioning system available. Efficiency equals savings, and geothermal heat pump systems substantially reduce operating costs over even the most efficient traditional systems.

## Natural Savings.

Over 70% of the total energy used in a typical home is for heating, cooling and water heating. With a geothermal heat pump system, up to 80% of this energy comes free directly from the earth.

## More Ways to Save.

A federal tax credit saves you 30% on the total cost when you install your geothermal heat pump system. Check with your state and local utilities to find out if other incentives are available in addition to the federal tax credit.



Calculations are based upon current utility costs for a typical home in the U.S. Midwest. Visit [climatemaster.com](http://climatemaster.com) to use our online energy calculator or contact a dealer for your detailed savings estimate.

# ENVIRONMENTAL TRANQUILITY

## Leading Technology.

Get the latest in geothermal heat pump technology. The Tranquility's advanced design includes two-stage operation. This provides higher efficiency, quiet operation and automatically adapts to provide the optimum comfort no matter what the weather is outside. The Tranquility® assures you of blissful comfort, maximum efficiency and low utility bills.

## Ultra-Quiet Operation.

To reduce noise, the Tranquility® Water-to-Water Series was designed and tested in our own certified sound lab, an industry exclusive. This series uses a double compressor isolation system that eliminates vibration and an acoustically lined cabinet. Also, unlike traditional systems, geothermal heat pumps have no noisy outdoor fans to disturb you or your neighbors.

## Long System Life.

The Tranquility® Water-to-Water Series is designed for a long service life, assuring you of savings for many years to come. Exclusive electronic controls provide worry-free operation. Each unit is backed by a 10-year limited warranty. Underground pipe provided by ClimateMaster carries a 50-year limited warranty.

## Safety and Cleanliness.

Geothermal systems use no flames to heat your home, so dangerous carbon monoxide and gas leaks are eliminated.

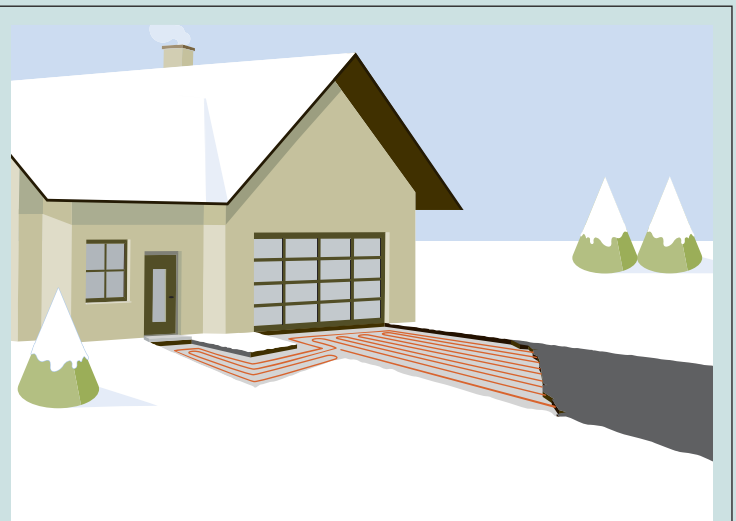
## Track Record.

Geothermal heat pumps are a reliable and proven technology that has been widely used for more than 30 years. Millions of geothermal heat pumps are in operation worldwide, keeping people comfortable in homes, schools, hospitals, military facilities and many other buildings.

*Rest comfortably — knowing you are saving up to 80% on energy costs while reducing your impact on the environment.*

## Star Among Energy Stars.

The environmental advantages of Energy Star qualified Tranquility® heat pumps are clear. Up to 80% of energy supplied comes directly from the Earth and is clean, free and renewable. This means geothermal heat pumps offer the lowest carbon footprint of any space conditioning technology. According to the U.S. Environmental Protection Agency (EPA), geothermal systems are "the most energy-efficient, environmentally clean and cost-effective space conditioning systems available today."



One advantage of the Tranquility® Water-to-Water Series is radiant floor heating that can also be used for snow/ice melt.

# TRANQUILITY TMW SERIES ADVANCED FEATURES AND OPERATION



Unit	Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
	Cooling		Heating		Cooling		Heating		Cooling		Heating	
	Capacity (Btuh)	EER (Btuh/W)	Capacity (Btuh)	COP	Capacity (Btuh)	EER (Btuh/W)	Capacity (Btuh)	COP	Capacity (Btuh)	EER (Btuh/W)	Capacity (Btuh)	COP
TMW-036	32,300	14.60	43,100	4.90	36,200	23.10	35,300	4.00	33,300	16.40	27,400	3.10
TMW-060	52,800	14.30	72,700	4.70	56,600	20.30	60,300	4.00	55,600	16.20	48,500	3.10
TMW-120	105,600	14.10	145,400	4.60	113,200	20.10	120,600	3.90	111,200	16.10	97,000	3.10

Tested in accordance with ASHRAE/AHRI/ISO 13256-2



# TRANQUILITY THW SERIES ADVANCED FEATURES AND OPERATION



Unit	Ground Loop Heat Pump				Ground Water Heat Pump			
	Heating				Heating			
	Capacity (Btuh) [kW]	COP W/W	Capacity (Btuh) [kW]	COP W/W	Capacity (Btuh) [kW]	COP W/W	Capacity (Btuh) [kW]	COP W/W
THW-10	32.6 [9.57]	4.2	30.8 [9.03]	3.3	42.6 [12.50]	5.2	39.9 [11.69]	4.1

Tested in accordance with ASHRAE/AHRI/ISO 13256-2

# SYSTEM COMPARISONS

	Tranquility® Medium Temperature Water-to-Water (TMW) Series			Tranquility® High Temperature Water-to-Water (THW) Series		
	Standard	Factory Option	Dealer Option	Standard	Factory Option	Dealer Option
EarthPure® HFC-410A Refrigerant	○			○		
Geothermal Operation	○			○		
Radiant Floor Capable	○			○		
Chilled Water Capable	○					
Single-Stage Compressor	○			○		
Copper Water Coil	○			○		
Cupro-Nickel Water Coil (Source)		○			○	
Thermal Expansion Valve	○			○		
Dual Vibration Isolation Compressor Mountings	○			○		
3 Compressor Section Access Panels	○			○		
Polyester Powder Coat Paint	○			○		
Stainless Steel Front Access Panels	○			○		
Remote Reset at Thermostat	○					
Microprocessor CXM Controls	○			○		
Unit Performance Sentinel™ Performance Monitor	○			○		
10-Year Limited Warranty	○			○		
Extended Labor Allowance and Service Warranty		○			○	
Flow Controller Loop Pumping Module			○		○	○
Built in Digital Temperature Control				○		
Hot Water Generator		○			○	
Dedicated Domestic Hot Water				○		

### **The Right Choice.**

ClimateMaster is the world's largest and most progressive manufacturer of geothermal heat pumps. We are committed to innovation and dedicated to environmentally clean, economically sound and superbly comfortable home and business environments. Each ClimateMaster product is produced in our state-of-the-art facility utilizing quality management systems that are ISO 9001:2008 certified. We strive for the highest product quality and service after the sale to give you peace of mind.

An LSB Industries, Inc. company (NYSE: LXU), ClimateMaster has been designing and building equipment that enhances environments we live and work in every day for more than 50 years. In addition to geothermal heat pumps, ClimateMaster offers the most extensive product line of water source heat pumps for use in a wide variety of applications.

### **ClimateMaster products are built in the U.S.A.**





24-hour information:

877-436-6263

**climatemaster.com**

7300 S.W. 44th Street

Oklahoma City, OK 73179

405-745-6000

An LSB Industries, Inc. Company (NYSE: LXU)



ClimateMaster works continually to improve its products. As a result, the design and specifications of each product at the time for order may be changed without notice and may not be as described herein. Please contact ClimateMaster's Customer Service Department at 405-745-6000 for specific information on the current design and specifications. Savings vary due to weather conditions, local conditions, user preferences, and utility rates. Statements and other information contained herein are not warranties and do not form the basis of any bargain between the parties, but are merely ClimateMaster's opinion or commendation of its products.

The quality management systems used in the manufacture of ClimateMaster's products are ISO 9001:2008 certified.

