



Residential Product Catalog



Enertech Headquarters - Greenville, IL

Building Partnerships

You've built your business by understanding what your customers need and want. You've set yourself apart with high quality, professional service.

You want to offer your customers products that meet their needs; innovative products that offers them more and saves them money. Many

products do one or the other, but it is rare that one can do both.

Hydron Module dealers have access to an innovative and high quality product line. You join a network of experienced professional HVAC dealers and become part of the Hydron Module family. Best of all, we listen, because we recognize that nobody understands your business

like you do. Your input is as critical to our success as it is to yours.

Whether you are looking to add a geothermal product to your product portfolio or are considering replacing an existing geothermal product line, the Hydron Module brand of geothermal, heating, cooling and domestic water heating systems is the right choice.

Building the Best

Every Hydron Module geothermal heat pump is handcrafted with pride by our dedicated employees in Mitchell, South Dakota.



Enertech Manufacturing Facility - Mitchell, SD



Enertech Manufacturing Facility - Mitchell, SD



Enertech Global, LLC

Enertech Global manufactures GeoComfort, Hydron Module, and TETCO geothermal brands. Our corporate headquarters is located in Greenville, Illinois. Our units are made exclusively in the United States, with production facilities located in Mitchell, South Dakota.

Enertech was founded in 1996 as a geothermal heat pump distributor. Since then, we've delivered award-winning product innovations and experienced phenomenal growth. Our focus remains on designing outstanding products and setting a new standard in the geothermal industry.

We believe that our success is built on strong relationships, which is why our distributors, dealers and end users of our products are so important.

Our commitment to customer care, product excellence, and quality craftsmanship guides the decisions we make.

Our four core values are:

1. To supply products that are of high quality and reliability
2. To produce products in a lead-time that meets our customers' expectations
3. To manufacture value-added products with the features and benefits that fit the needs of our customers
4. To offer products at a price point that is competitive in the marketplace that meet the first three objectives

By achieving these goals, Enertech Global is in a distinctive position to meet the needs of your customers and enhance the profitability of your business.



Steve Smith - Enertech President & CEO

Enertech is proud to be a part of NIBE Industrier AB, an 8,000 employee strong European company and the largest geothermal heat pump manufacturer in the world.

Philosophy

Enertech is a company with family values and beliefs. As such, we are committed to the following:

- **Partnerships:** We believe you don't have to be related to be family
- **Excellence:** We believe our employees are our most valuable asset
- **Loyalty:** We believe in earning the trust and allegiance of those who sell our products. We believe that they deserve our best quality and service, which puts us in a distinctive position to enhance the profitability of our customers' businesses
- **Certainty:** We believe home and business owners deserve assurance of reliability, comfort, and savings. They should be our strongest advocates and an indicator of our company's success
- **Obligation:** We believe we are responsible for contributing to the well-being of the communities, cities and countries where we do business
- **Conscience:** We believe in improving the global atmosphere through environmental consciousness, a culture of care and enduring optimism

Why Geothermal?

Residential geothermal awareness has never been higher. In today's chaotic economy, consumers have a social desire for green solutions, but they want something affordable. Environmentally and budget conscious homeowners are attracted to geothermal technology by its high efficiency and low operational and lifespan costs. In recent years, geothermal sales have increased in part due to a better understanding that these systems are a viable and affordable option for existing homes as well as new construction applications.

Incentives for geothermal systems have also elevated the technology to top of mind. Consumers are seeking high zero net energy. In fact, the United States and Canadian governments are now promoting and encouraging the use of geothermal heat pump technology.

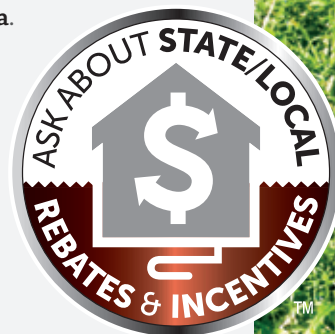
Now is the time to add Hydron Module geothermal heating and cooling systems to your product offerings.

Financial Incentives

In addition to the extensive benefits offered by a geothermal heating and cooling system, there are also numerous financial incentives being offered across North America.

Many local municipalities, state entities, and utilities offer rebates or other financial incentives to homeowners installing a geothermal system. Be sure to research their availability to ensure maximum benefit of installing a new efficient geothermal heating and cooling system. In the US, the online Database of State Incentives for Renewables and Efficiency is a helpful resource. Visit www.dsireusa.org. Contact your local utility or electric cooperative to find out what programs they offer.

Some Canadian provinces also offer rebates for Canadian residents installing a geothermal system. Since these offerings vary by Province, interested parties should check their Province's rebates/incentives at <http://www.nrcan.gc.ca>.



Why Hydron Module?



- Hydron Module products have a **10/10/5+5 Standard Warranty (10-year geothermal unit parts/10-year select accessories/5-year limited labor allowance)**. With product registration,

Hydron offers a Free Warranty Upgrade, extending the labor allowance to 10 years (additional coverage for years 6-10). An Optional

Limited Lifetime Warranty is also available on the compressor and all-aluminum microchannel air coil (requires product registration). **This is the best geothermal warranty available.**

- Hydron Module's ZS/ZT horizontal packaged, YT, XT and CT vertical packaged models are **multi-positional**, providing the ultimate in **installation flexibility**, while reducing dealer/distributor inventory needs.

- Hydron Module was the first to use an **all-aluminum microchannel air coil**, which eliminates failure caused by formicary corrosion. This improves the reliability of the unit.

- All Hydron Module units come equipped with an oversized, copper rifled coaxial water heat exchanger for increased surface area, providing significantly higher efficiencies than required by the **ENERGY STAR** program.

- **Hot Water Generator** is standard with all Hydron Module units. This allows

the capture of free, unused heat, **cutting hot water costs by up to 50%**.

- Hydron's newest models showcase our latest innovations like **elastomeric compressor vibration absorption pads**. This technology provides isolation between the compressor and the cabinet, resulting in whisper quiet operation.

- Hydron Module split systems have AHRI (Air-Conditioning, Heating, and Refrigeration Institute) **certified air handler matches** for every model. That means **better performance** and guarantees the operating efficiency of the system, which is a requirement for many rebate and incentive programs.

- Hydron Module units are assembled in the heart of America and undergo **rigorous quality testing**. Our **superior craftsmanship** ensures a lifetime of reliable operation.

- **ECM blower motors are standard** on all Hydron Module 2-stage models. These variable-speed motors ensure quiet start up and operate at a fraction of the cost of a conventional blower motor.

- The Hydron Module Variable-Speed Water-to-Water system is **powered by inverter-driven technology** to provide efficient radiant heating and cooling, forced air heating and cooling, and 100 percent of the domestic hot water. **One compact system does it all**, and it's easy to commission and service.

- Hydron Module only uses **Copeland scroll compressors** in their heat pumps. This proven compressor technology ensures **better reliability** due to fewer moving parts. The inherent design of the scroll compressor requires less energy than other compressors to do the same amount of work, resulting in **higher efficiencies**.

- A **hybrid heating or dual-fuel** system is possible with Hydron Module split systems. In combination with a new or existing natural gas/oil/propane furnace, the split-system will provide all of the air conditioning for the home, as well as 80-90% of the heating requirements. The system switches over to the furnace in extreme cold temperatures for the remaining 10-20% of the time, providing optimum comfort and efficiency even for existing homes.

- Hydron Module YT, XT and CT models feature a **plastic drain pan with built-in anti-microbial treatment**. This means no corrosion, longer lifespan, and resistance to mold and mildew.

- **Most Hydron Module water-to-water unit are reversible**, offering **chilled water for air conditioning**, which comes standard with the system. Unlike some other geothermal units, you will never have to invest in a supplementary air conditioning unit in addition to your Hydron geothermal system.

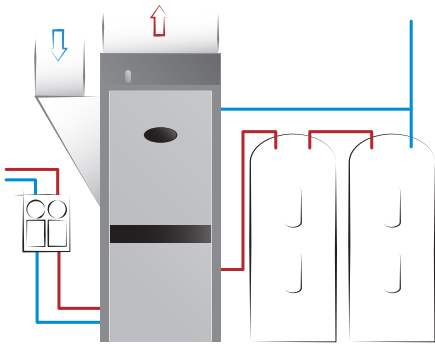
To further demonstrate our commitment to customers, Enertech has been certified to ISO 9001 and ISO 14001 quality and environmental management standards.



Geothermal Applications

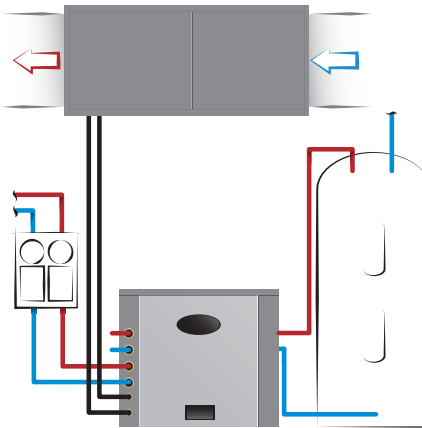
When it comes to geothermal system applications, there are many different installation options and product configurations. Hydron Module has a full line of products to fit any residential application. The following illustrations highlight several common installation scenarios.

Forced Air



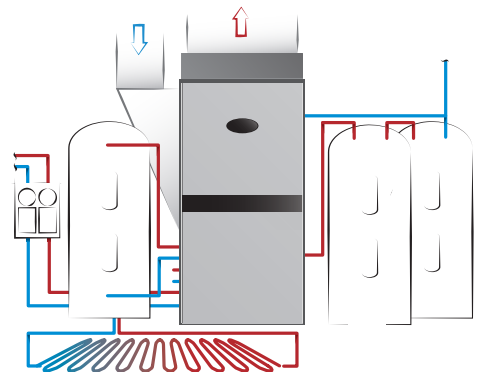
A Vertical or Horizontal Packaged System provides ducted heating and cooling. It also can provide domestic hot water.

Indoor Split



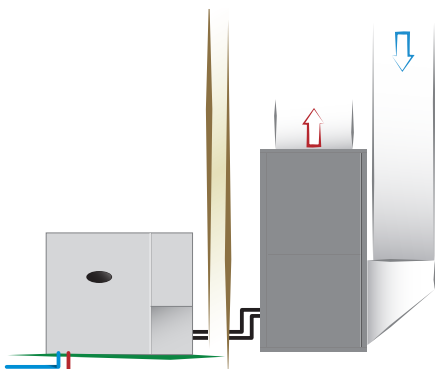
A Split System provides ducted heating and cooling using remote air handler or gas/propane system. The unit can also provide domestic hot water.

Combination



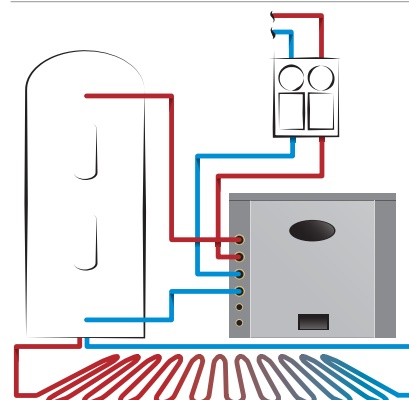
Combination Systems provide ducted heating and cooling like a traditional Packaged System, and can also provide radiant heat using a storage or buffer tank. The unit can also provide domestic hot water.

Outdoor Split



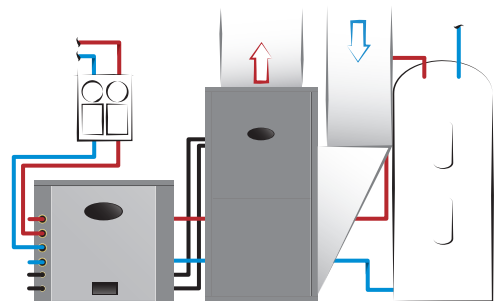
A Split System provides ducted heating and cooling using remote air handler or gas/propane system. The unit can also provide domestic hot water. The geothermal unit is installed outdoors, making it ideal for retrofit applications.

Single, Two-Stage or Variable-Speed Water-to-Water



Water-to-Water Systems can provide radiant heat and domestic hot water using a storage or buffer tank. If you choose the variable-speed water-to-water system, it can provide radiant heating & cooling, ducted heating and cooling and up to 100% of your domestic hot water needs.

Dual-Fuel



A Split System can be used with an existing gas, electric or propane furnace and/or air handler to create a hybrid system. The Split provides ducted heating and cooling in this application. This installation is ideal for remote, rural and retrofit applications.

Hydron Module Product Matrix

Product Features

Function	HYT Models	HVS/VT Models	HXT Models	HZS/ZT Models	HHT Models	HCT Models	HBS/BT Models	HRT Models	HWV Models	HWT Models	HWS Models	HWD Models	HHP Models
Forced Air	Forced Air	Forced Air	Forced Air	Forced Air	Forced Air	Combo	Split System	Split System	Hydronic	Hydronic	Hydronic	Hydronic	Hydronic
Cabinet Configuration	Multi-Positional Vertical	Compact Vertical	Multi-Positional Vertical	Compact Horizontal	Horizontal	Multi-Positional Vertical	Indoor Split	Outdoor Split	Water-to-Water	Water-to-Water	Water-to-Water	Water-to-Water	Water-to-Water
Compressor Stages	2	1 / 2	2	1 / 2	2	2	1 / 2	2	Variable	2	1	1 / 2	1
Sizes	2 - 6 Tons	.5 - 6 Tons	2 - 6 Tons	.5 - 6 Tons	2 - 5 Tons	2 - 6 Tons	1.5 - 6 Tons	2 - 5 Tons	1.5 min - 5 max	3 - 10 Tons	3 - 8 Tons	10 Ton	2 Ton
Refrigerant	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a
Heating Efficiency (COP) †	5.8 - 3.8	5.4 - 3.3	5.4 - 3.6	4.4 - 3.2	4.9 - 3.7	5.1 - 3.6	5.0 - 3.4	4.4 - 3.4	3.0 - 3.9	3.8 - 2.8	4.1 - 3.1	3.6 - 2.8	3.1
Cooling Efficiency (EER) †	37.4 - 18.0	33.0 - 15.1	35.0 - 17.1	29.8 - 16.2	29.7 - 16.8	29.4 - 16.2	35.6 - 16.4	25.4 - 15.9	18.4-24.4	24.5 - 14.6	23.5 - 16.1	22.0 - 14.5	N/A
Copper Coax	✓	✓	✓	Braze Plate***	✓	✓	✓	✓	Braze Plate	✓	Braze Plate	Braze Plate	✓
CuproNickel Coax	Optional	Optional	Optional	Future	Optional	Optional	Optional	Optional	N/A	Optional	Tube-in-Shell	Tube-in-Shell	Optional
Coax Insulation	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Tape	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Tape	Foam Tape	Foam Tape	Foam Enclosed
Air Coil	Aluminum Micro-Channel	Aluminum Micro-Channel	Aluminum Micro-Channel	Aluminum Micro-Channel	E-Coated Tube & Fin	Aluminum Micro-Channel	Tube & Fin*	Tube & Fin*	Tube & Fin*	Tube & Fin*	Tube & Fin*	Tube & Fin*	Tube & Fin*
Desuperheater	Standard	Standard ¹	Standard	Standard ²	Standard	Standard	Standard	Option	Indirect Hot Water	Standard	Standard	Standard	Vented Coax ⁸
Auxiliary Electric Heat	One-Piece Internal	Close Coupled ³	One-Piece Internal	External Duct Heater ⁴	External Duct Heater	One-Piece Internal	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**
Blower	Variable Speed ECM	PSC Standard, ECM Option ⁵	Variable Speed ECM	PSC Standard, ECM Option ⁶	Variable Speed ECM	Variable Speed ECM	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**
Selectable CFM	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Freeze Protection	Digital	Digital	Flow Switch	Digital & Flow Switch	Flow Switch	Flow Switch	Flow Switch	Flow Switch	Digital & Flow Switch	Flow Switch	Digital	Digital	Digital
Controls	Digital	Digital	Digital	Digital	Digital	Digital	Digital	Digital	Advanced Digital	Digital	Digital	Digital	Digital
Water Fittings	Double O Ring	Double O Ring	1" FPT	1" FPT	3/4" - 1" FPT ⁷	1" FPT	1" FPT	Double O-ring	Double O-ring	1" FPT	1" MPT	1.25 - 2" MPT	Double O-ring/3/4" - 1" FPT
Air Handler Match	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓	✓▲	✓▲	✓▲	✓▲	✓▲
"A" Coil Match	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓	✓▲	✓▲	✓▲	✓▲	✓▲
Warranty (Parts/Labor)	10/10/5+5	10/10/5+5	10/10/5+5	10/10/5+5	10/10/5+5	10/10/5+5	10/10/5+5	10/10/5+5	10/10/5+5	10/10/5+5	10/10/5+5	10/10/5+5	5/1
Limited Lifetime Compressor & MCHX	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	-	Optional	Optional	Optional	-

Notes:

- * Matched Air Handler & "A" Coil
- ** Air Handler Only
- *** ZS006-012 Coax
- † Part load/ full load range
- ▲ Optimized
- 1 Desuperheater not offered for VS006-015
- 2 Desuperheater not offered for ZS006-012
- 3 Aux. Heat not offered on VS006-018
- 4 Aux. Heat not offered on ZS006-017
- 5 ECM Motor not offered on VS006-012
- 6 ECM Motor not offered on ZS006-012
- 7 ZS006-017 - 3/4" FPT, ZSZT018-072 - 1" FPT
- 8 Vented Version Only



HYT | 2-Stage Multi-Position Vertical Packaged Unit



The Evolution of Comfort

The Hydron Module Multi-Position Vertical Packaged unit is geothermal that has advanced to meet your changing needs. Each unit is built to high standards of quality and craftsmanship that you expect from Hydron Module. This premier system is the ultimate solution for increased efficiency, unsurpassed comfort and exceptional reliability. We've transformed the concept of geothermal using the latest, innovative technology to bring you a heating and cooling system that's evolved to perfection.

Hydron YT models provide forced air heating and cooling like most conventional systems – but the similarities end there. These systems utilize the most advanced geothermal technology, resulting in a heat pump that is superbly efficient, exceptionally reliable, and so quiet you may not even realize it's running. We're changing way you think about comfort.

Unit Features

- 5 sizes: 024, 036, 048, 060, 072
- Copeland UltraTech® 2-stage scroll compressor
- Multi-position cabinet (left or right return)
- All-aluminum microchannel air coil
- Sound and vibration absorbing elastomeric compressor isolation pads
- ECM blower motor
- Foam enclosed, enhanced surface coaxial heat exchanger
- UL GREENGUARD Gold certified foam cabinet insulation
- Side or back air discharge factory option
- Digital controls with enhanced unit protection
- Top or side mount, eye level controls
- R-410a zero-ozone depletion refrigerant
- Heavy gauge, painted steel cabinet with stainless steel door panels
- Factory installed desuperheater
- Optional cupronickel coax
- Standard 10/10/5+5 Warranty
- Optional Limited Lifetime Microchannel Air Coil and Compressor Warranty available
(see warranty page for details)



Don't Sweat the Small Stuff

The Origin Series VS/VT models are built upon our heritage of superb craftsmanship with the highest quality materials and unmatched attention to detail. The Compact Vertical Packaged model combines many of the innovative features found in the Hydron Module product line with a smaller cabinet that is perfect for installations where space is limited.

These systems provide forced air heating and cooling like most conventional systems – but the similarities end there. Hydron Module has utilized advanced geothermal technology to create a heat pump that is remarkably efficient, exceptionally reliable, and whisper quiet. You'll marvel at how such a small system produces such amazing comfort.



Unit Features

- 17 sizes: 006, 009, 012, 015, 018, 024, 030, 036, 042, 048, 060, 072 (single stage); 024, 036, 048, 060, 072 (2-stage)
- Copeland single-stage or UltraTech® 2-stage scroll compressor
- All-aluminum microchannel air coil
- Sound and vibration absorbing elastomeric compressor isolation pads
- Standard PSC or optional ECM blower motor (single-stage). ECM blower standard on 2-stage
- Foam enclosed, enhanced surface coaxial heat exchanger
- UL GREENGUARD Gold certified foam cabinet insulation
- Digital controls with enhanced unit protection
- Hinged control box lifts up for easy internal service
- R-410a zero-ozone depletion refrigerant
- Heavy gauge, painted steel cabinet with stainless steel door panels
- Optional desuperheater
- Optional cupronickel coax
- Standard 10/10/5+5 Warranty
- Optional Limited Lifetime Microchannel Air Coil and Compressor Warranty available (see warranty page for details)



HXT | 2-Stage Multi-Position Vertical Packaged Unit



High Technology Meets High Style

The Revolution Series, vertical packaged model took the industry by storm winning multiple awards, such as The NEWS 2010 Dealer Design Awards. The innovative multi-positional cabinet is field convertible to upflow/downflow with right or left return makes life easier for both dealers and distributors to install and stock.

However, our innovation didn't stop there. Hydron Module, in its continual drive to be an industry leader, has solved another age-old issue: Formicary corrosion. In 2011, our XT models began production using an all-aluminum microchannel air coil.

Unit Features

- 5 sizes: 024, 036, 048, 060, 072
- Multi-position cabinet (left return, right return, upflow, downflow convertible)
- Copeland UltraTech® 2-stage scroll compressor
- All-aluminum microchannel air coil
- Composite, antimicrobial drain pan
- Heavy gauge, painted steel cabinet with stainless steel door panels
- Top mount, eye level controls
- ECM blower motor
- Desuperheater with internal pump
- Factory supplied filter rack and 1" thick MERV 8 pleated air filter
- R-410a zero-ozone depletion refrigerant
- Optional cupronickel coax
- Standard 10/10/5+5 Warranty
- Optional Limited Lifetime Microchannel Air Coil and Compressor Warranty available
(see warranty page for details)



NEW

HZS/HZT | Single or 2-Stage Compact Horizontal Packaged Unit

Compact and Quiet

Meet the next generation horizontal geothermal system. The Origin Series Compact Horizontal has an all new design that takes advantage of the best technologies. Its small cabinet is the most striking feature. ZS/ZT models are perfectly sized for tight spaces or suspending above a ceiling.

Internally, state-of-the-art components work together to reduce noise and vibration, resulting in ultra-quiet operation, while achieving high efficiencies. Ease of installation and service are features of every Hydron Module model, and the ZS/ZT horizontal is no exception. Its lightweight cabinet, removable panels, and hinged control box make this unit an HVAC technician's best friend.



Unit Features

- 18 sizes: 006, 009, 012, 015, 017, 018, 024, 030, 036, 042, 048, 060, 072 (single-stage); 024, 036, 048, 060, 072 (2-stage)
- Copeland single-stage or UltraTech® 2-stage scroll compressor
- All-aluminum microchannel air coil with foam enclosed braze plate heat exchanger
- Sound and vibration absorbing elastomeric compressor isolation
- Field convertible for side or end discharge with left or right return
- UL GREENGUARD Gold certified foam cabinet insulation
- Digital controls with enhanced unit protection
- Airtight blower section
- Standard PSC or optional ECM blower motor (single-stage). ECM blower standard on 2-stage.
- Hinged control box lifts up or out for easy internal service
- Heavy gauge steel cabinet with stainless steel door panels
- Optional desuperheater
- Optional cupronickel coaxial
- Standard 10/10/5+5 Warranty
- Optional Limited Lifetime Microchannel Air Coil and Compressor Warranty available
(see warranty page for details)



HCT | 2-Stage Multi-Positional Vertical Combination Unit



All The Comfort. All The Flexibility.

Our combination systems merge a forced air heating and cooling system with the indulgence of whisper quiet radiant heating in a single unit. This system allows your family to enjoy the comfort of floor-warming, hydronic heat in specific parts of your home while also delivering efficient forced air heating in other areas. As with all Hydron Module geothermal systems, air conditioning is also supplied by this single unit.

However, our continual drive of industry leadership and innovation has made a great unit even better. We've also solved another age-old issue: Formicary corrosion. All CT models are built with a standard all-aluminum microchannel air coil that helps eliminate coil failure due to corrosion.

Unit Features

- 5 sizes: 024, 036, 048, 060, 072
- Multi-position cabinet (left return, right return, upflow, downflow convertible)
- Copeland UltraTech® 2-stage scroll compressor
- All-aluminum microchannel air coil
- Hydronic heating function
- Composite, antimicrobial drain pan
- Heavy gauge, painted steel cabinet with stainless steel door panels
- Top mount, eye level controls
- ECM blower motor
- Desuperheater with internal pump
- Factory supplied filter rack and 1" thick MERV 8 pleated disposable filter
- R-410a zero-ozone depletion refrigerant
- Optional cupronickel coax
- Standard 10/10/5+5 Warranty
- Optional Limited Lifetime Microchannel Air Coil and Compressor Warranty available
(see warranty page for details)



NEW

HBS/HBT | Single or 2-Stage Indoor Split Unit

Home Comfort, Made Better.

Hydron Module's next generation is built on a legacy of innovation and improvement. Our new award winning split unit was redesigned from the ground up incorporating the best elements from our newest models into a compact, efficient and ultra-quiet system.

The new split system is incredibly versatile making it well suited for replacement and new construction applications. The space-saving footprint of this unit makes it an excellent choice for homes with minimal space for mechanical equipment. When matched with an air handler, the split can provide ducted heating and cooling as well as domestic hot water. The split can also be paired with a conventional furnace to create an ultra-efficient dual-fuel hybrid system.



Unit Features

- 6 sizes: 018 (single-stage); 024, 036, 048, 060, 072 (2-stage)
- Optional matched multi-position air handler
- Industry standard line set sizes
- Whisper quiet design. Only from Enertech
- Digital, diagnostic controls
- Copper coaxial water heat exchanger with optional cupronickel
- Copeland UltraTech® 2-stage scroll compressor
- Standard hot water generator/desuperheater
- Standard 10/10/5+5 Warranty
- Optional Limited Lifetime Compressor Warranty available
(see warranty page for details)



REVOLUTION²

HRT | 2-Stage Outdoor Split Unit

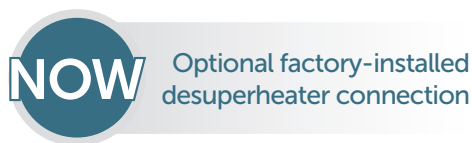


Retrofit Champion.

As retrofit installations become an ever-growing part of the marketplace, the need for simple and quick installation solutions grows as well. In most cases, homeowners don't want to wait for their new system to be installed, or are in a situation where a quick replacement is necessary.

This is where Hydron Module has yet again set an all-new direction in the industry with the Revolution Series Outdoor Split.

Designed around years of geothermal installation expertise and feedback from customers, the RT has some of the most advanced features available. These features allow the installer to place the unit exactly where it needs to go as quickly and easily as possible.



Unit Features



The innovative design of the unit is centered on ease of installation. Shown above, the loop can easily be brought to the unit from almost any angle. Additionally, the unit could be rotated 90° counterclockwise if needed.

- 4 sizes: 024, 036, 048, 060
- UV protected outdoor cabinet
- Copeland UltraTech® 2-stage scroll compressor
- Factory installed freeze protection
- Uses standard flow center with installer-selected configuration
- Standard size back-seated service valves
- Optional factory installed connection for external desuperheater
- Side-mount flow center connection
- Included outdoor installation kit (flow center sold separately, see unit accessories)
 - Flow center cover
 - Aluminum pipe shield
 - Pump wiring harness
 - Hose kit
 - 90° PE street elbows
- R-410a zero-ozone depletion refrigerant
- Standard 10/10/5+5 Warranty
- Optional Limited Lifetime Compressor Warranty available (see warranty page for details)

REVOLUTION®



NEW

HWV | Variable Speed Water-to-Water Unit

Revolutionary Comfort and Efficiency: The First of Its Kind

Enertech engineers, dealers, and technicians worked together to create a hypothetical design so innovative that it would revolutionize home comfort; and that system is here! Introducing the future of geothermal water-to-water heat pumps: our variable-speed water-to-water.

Our new Hydron Module variable-speed, variable-capacity heating and cooling system adjusts the BTUH output to match the load profile for desired comfort settings. With the help of an outdoor temperature sensor, the modulating compressor adjusts to deliver the perfect water temperatures for a radiant or hydronic system application. This is vital because the efficiency of a water-to-water geothermal unit increases significantly with lower water temperatures.



Unit Features

- Size: 060 (variable-speed compressor)
- Radiant, in-floor heating and cooling, forced air heating and cooling, and 100% of the domestic hot water in one compact unit
- High temperature performance, leaving water temperature up to 135° F
- Large easy-to-read high-mounted LCD control center
- Time saving, easy to commission start-up wizard
- Direct readout of running conditions on the LCD control screen
- Electronic expansion valve
- Double o-ring connections
- Integrated variable-speed load pump
- Heavy gauge, painted, galvanized steel cabinets
- Hydronic options, cased / uncased coils / airhandlers
- Standard 10/10/5+5 Warranty

(see warranty page for details)



CRUISE

HHP | Single-Stage High Performance – High Temperature Water-to-Water Unit

NEW



High Temperature Hot Water, Efficiently Delivered!

The Hydron Module High-Performance Water-to-Water geothermal system is the ultimate solution for heating only applications where standard 120 degrees Fahrenheit leaving water temperature is not sufficient. Its enhanced design increases water temperature output by 20 degrees.

A vented coax option can provide 100% of the home's domestic hot water supply, substantially reducing water heating costs without requiring a significant amount of space or installation time. Additionally, the non-vented coax option is ideal for radiant heating and pool heating applications.

Unit Features

- Size: 024
- Vented and unvented options
- High density closed cell foam insulation
- Hinged control box swings out / removes for easy access
- Top and all side panels remove for service
- Triple mounted compressor isolation
- Foam insulated, enhanced surface coaxial heat exchanger
- Single-stage reliable reciprocating compressor
- Thermistor freeze-protection
- Side-mount water and refrigerant connections
- Standard 3/4-inch fittings on vented coax model.
- Unvented coax option features 1-inch fittings.
- Double o-ring fittings
- Meets ENERGY STAR® requirements for efficiency
- Standard 10/10/5+5 Warranty

(see warranty page for details)

REVOLUTION²



The Best in Hydronic Comfort.

Hydron Module Revolution Series geothermal systems are expertly designed to be technologically advanced and exceptionally efficient. The result is a heating and cooling system as beautiful as it is functional.

Hydron Module hydronic (water-to-water) units offer a unique set of system benefits, the most remarkable of which is radiant heating. This extremely comfortable heating solution warms your home from the floor up, allowing for constant and uniform heat distribution without hot and cold spots. Radiant heating is ductless heating. By eliminating the sound of forced air the total system noise is reduced. Revolution Series water-to-water units are also reversible and capable of providing chilled water for air conditioning.



As seen on
This Old House®

Unit Features

- 6 sizes: 036, 048, 060, 092, 120, 144 (models 092-144 have two compressors)
- Optional hydronic air handler and "A" coils
- High efficiency Copeland UltraTech® scroll compressor (036 - 092(2); 2 single speed scrolls on 120 & 144)
- Digital controls
- Radiant ready
- Heavy gauge, painted steel cabinet with stainless steel door panels
- Copper or cupronickel coaxial water heat exchanger
- Desuperheater standard
- Standard 10/10/5+5 Warranty
- Optional Limited Lifetime Compressor Warranty available (see warranty page for details)



REVOLUTION®

HWS/HWD | Single-Stage and Dual Compressor Water-to-Water Unit



Maximum Comfort Plus Maximum Efficiency – Now in a Smaller Box.

Although the Hydron Module single-stage hydronic models are small in size, they're big in efficiency! The WS models boast an overall smaller footprint and lighter weight than it's WT model siblings.

What's more, Hydron Module single-stage and dual compressor water-to-water models utilize stainless steel brazed plate heat exchangers, a time-proven technology that makes them incredibly efficient. The units are designed to supply heated or chilled water for use in a wide range of heating and cooling applications such as radiant heating or places where zones temperature or humidity controls are needed.

The WD120 model features dual compressors for 2-stage operation.

Unit Features

- 6 sizes: 036, 048, 060, 072, 084, 120
- Copeland single-stage scroll compressor
- Dual Copeland single-stage scroll compressor on WD120
- Front, top & rear access
- Electronic controls with safety lock out
- Stainless brazed plate heat exchangers (BPHX)
- Thermostatic expansion valve
- High and low access ports
- Desuperheater with internal pump
- Heavy gauge, painted steel cabinet with stainless steel door panels
- R-410a zero-ozone depletion refrigerant
- Optional cupronickel heat exchanger
- Standard 10/10/5+5 Warranty
- Optional Limited Lifetime Compressor Warranty available
(see warranty page for details)



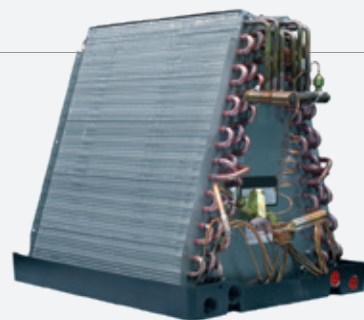


MP Series Multi-Position DX Air Handlers

- AHRI match for Hydon Module split systems
- Multi-position air pattern
 - Ships in upflow configuration
 - Field convertible to downflow and horizontal configuration (downflow kit required for downflow operation)
- Variable-speed ECM fan motor
- Factory-installed R-410a TXV
- Corrosion-proof plastic drain pan with primary and secondary drain connections
- Oversized copper tube/aluminum fin "A" coil for maximum efficiency
- Sweat refrigerant line set connections
- Narrow width (25" maximum) for small closet installations
- Slide-out blower assembly
- Optional downflow kit
- Optional field-installed internal electric heat with circuit breakers
- Optional filter rack with standard size 1" filters
- Standard 10/5+5 Warranty coverage

AC Series DX "A" Coils

- AHRI match for Hydon Module split systems
- Uncased design for maximum flexibility, especially on retrofit applications
- Corrosion-proof plastic drain pan with primary and secondary drain connections
- Oversized copper tube/aluminum fin "A" coil for maximum efficiency
- Sweat refrigerant line set connections
- Factory-installed R-410a TXV
- Standard 10/5+5 Warranty coverage



MC Series DX Cased Coils

- Same features as the AC DX "A" Coil, but enclosed in a rigid cabinet for easy installation, especially on retrofit applications.

Air Handlers and Coils

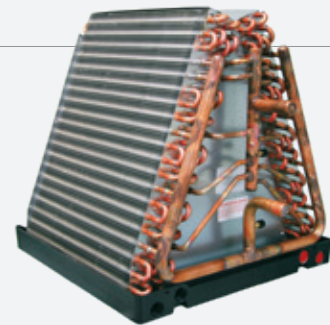
MP Series Multi-Position Hydronic Air Handlers

- Optimized for use with Hydron Module water-to-water heat pumps
- Multi-position air pattern
 - Ships in upflow configuration
 - Field convertible to downflow and horizontal configuration
- Variable-speed ECM fan motor
- Single coil for both chilled water and hot water
- Designed for 100°F to 120°F water in heating operation
- Oversized copper tube/aluminum fin “A” coil for maximum efficiency
- Copper sweat water connections
- Narrow width (25” maximum) for small closet installations
- Slide-out blower assembly
- Corrosion-proof plastic drain pan with primary and secondary drain connections
- Optional filter rack with standard size 1” filters
- Standard 10/5+5 Warranty coverage



AC Series Hydronic “A” Coils

- Optimized for use with Hydron Module water-to-water heat pumps
- Single coil for both chilled water and hot water
- Designed for 100°F to 120°F water in heating operation
- Corrosion-proof plastic drain pan with primary and secondary drain connections
- Copper sweat water connections
- Standard 10/5+5 Warranty coverage



MC Series Hydronic Cased Coils

- Same features as the AC Hydronic “A” Coil, but enclosed in a rigid cabinet for easy installation, especially on retrofit and dual-fuel applications.

Unit Accessories



Loop Pipe

- Pre-assembled U-bend coils
- Coiled pipe
- Straight pipe
- Pond spaced coils



Fittings

- Headers
- Couplings
- Elbows
- Tees
- Unions
- Bushings

Flow Centers & Replacement Pumps

Composite/Brass Valve Double O-ring Fittings

- Double O-ring fittings or 1" NPT connections
- Front flush ports
- Foam insulated cabinet stops condensation
- High impact polystyrene cabinet will not rust
- Fully assembled and leak tested



Non-Pressurized

- Double O-ring fittings or 1" NPT connections
- Foam insulated cabinet stops condensation
- Fully assembled and leak tested
- Variable-speed available



Variable-Speed

- Magna GEO pumps
- ECM motor technology
- 1" brass flush valves
- Built-in control
- Graphic display



Hose Kits & Loop Add-Ons

- GeoPrime reservoir tanks
- Geo Booster
- Pressure batteries

Thermostats



Sensi Wi-Fi

- Extreme temperature notification
- 7 day programmable
- Remote access and contractor contact info with smartphone app
- 4 Heat / 2 Cool stages
- Keypad lockout
- Multi thermostat control



Sensi Touch Wi-Fi

- HD color touchscreen
- Can change temperature setting based on GPS location
- Smart home compatible
- Easy-click, no screwdriver terminals



Touch Screen

- Single-stage / multi-stage
- Programmable (7-day, 5/1/1 day) or non-programmable
- Hard wired or battery powered with power stealing assist
- Remote sensing indoor or outdoor and at the thermostat
- Programmable fan with comfort circulator fan option
- Enhanced dehumidification control
- Automatic daylight savings option
- Flow-through humidifier water-saving feature — up to 50%
- Large, 12 square inch display with 10-second backlight
- Exclusive energy saving feature during peak A/C demand periods
- Dual-fuel heat pump logic program requires no outdoor sensor



Non-Programmable

- Large easy to read screen with a bright backlit display
- Adjustable temperature set point min. /max. limits
- Auto changeover
- Dual-fuel control
- Keypad lockout
- 4 Heat / 2 Cool stages

Unit Accessories

EWC Zoning Dampers & Panels

URD

- Nylon blade shaft notched to indicate blade position
- Male crimped end to ease installation process
- Open and closed LEDs indicate blade position
- Nylon shaft provides thermal barrier to eliminate condensation
- Integrated seal eliminates loose gasket material
- Integrated door seal provides 97% shut off to 1" W.C.
- Min/Max adjustable closed set points



SID [SLIP-IN-DAMPER]

- Allows for up to 20 SID's on one EWC control panel
- More sizes available than any other component
- Optional end switch for additional interface



UZH : COMPATIBLE WITH ALL HVAC SYSTEMS UP TO 4 STAGES OF HEAT AND 2 STAGES OF COOL

- Auto-changeover and fan control from any zone
- Computer watchdog circuitry prevents lock-ups from power failures and power interruptions
- Controls up to 20 zones
- LED display for complete diagnostic system readout
- Adjustable heating and cooling limits to protect equipment



BMPLUS : COMPATIBLE WITH ALL HVAC SYSTEMS UP TO 3 STAGES OF HEAT AND 2 STAGES OF COOL

- Dual-fuel kits not required
- One zone mode
- Automatic changeover from any zone
- Computer watchdog circuit to ensure operation
- Supply air sensor included
- Optional outdoor air sensor



ND

- Nylon blade shaft notched to indicate blade position
- Heavy gauge extruded aluminum frame
- Nylon blade bushings allow for smooth, quiet operation
- Open and closed LEDs indicate blade position
- Nylon shaft provides thermal barrier to eliminate condensation
- Overlapping blades provides 97% shut off up to 1" W.C.
- Custom and odd sizes available



NCM : SINGLE STAGE, DUAL-FUEL AND HEAT PUMP COMPATIBLE UP TO 3 ZONES

- Computer watchdog circuit
- Auto-changeover from any zone
- LED display for complete system read out
- Supply air sensor to protect equipment
- Adjustable purge time

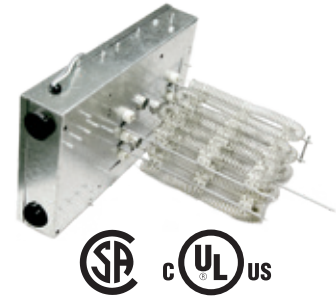


Unit Accessories

Auxiliary Heaters

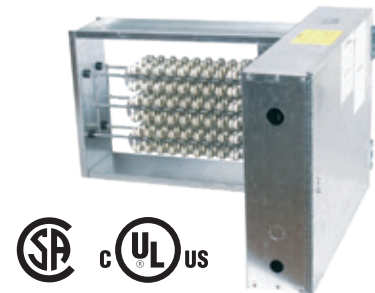
INTERNAL AUXILIARY ELECTRIC HEATER

- Single piece design (no separately mounted control box)
- Heater staging (HYT, HXT & HCT models)
- Internal circuit breakers
- Low voltage harness for direct connection to relay board
- Automatic high limit and auxiliary limit switches for over temperature protection



EXTERNAL DUCT HEATER

- Used for horizontal units
- Left hand offset control box
- Automatic limit switch for primary over temperature protection
- Energized magnetic control contractor per stage
- Manual reset limit switch for secondary over temperature protection
- Removable hinged access door with latch
- Internal fusing where required by NEC and UL



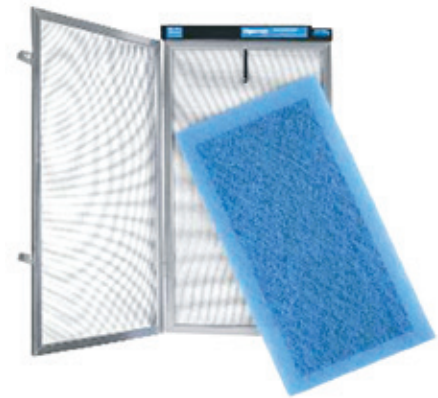
Unit Accessories

Filters

ELECTRONIC DYNAMIC® FILTER

- High efficiency electronic air cleaners
- MERV equivalency rating of 13
- Disposable low static polarized media
- Media contains activated charcoal

Sizes: 16"x 20"x 1" up to 28"x 34"x 1"
(see price book for actual sizes and compatibility)



ELECTROSTATIC FILTERS

- Self charging media
- 3 filtration layers
- Washable filter
- Lifetime warranty

Sizes: 16"x 20"x 1" up to 38"x 36"x 1"
(see price book for actual sizes and compatibility)

Unit Performance Data

Model	Type	Cooling with PSC Blower		Heating with PSC Blower		Cooling with ECM Blower Option		Heating with ECM Blower Option		Dimensional Data			Height with Control Box	Unit Weight (lbs)
		BTU	EER	BTU	COP	BTU	EER	BTU	COP	Height	Width	Depth		
Single-Stage Compact Vertical Packaged (PLEASE NOTE PSC AND ECM BLOWER LISTINGS) 1, 3, 4, 5, 6, 7, 8, 14														
VS006	Ground Water	7,800	25.8	7,000	4.6	—	—	—	—	30"	21.5"	21.5"	—	167
	Ground Loop	7,200	18.6	5,600	3.7	—	—	—	—					
VS009	Ground Water	11,900	22.1	10,600	4.4	—	—	—	—	30"	21.5"	21.5"	—	234
	Ground Loop	10,900	17.4	8,500	3.6	—	—	—	—					
VS012	Ground Water	13,400	24.1	12,100	4.3	—	—	—	—	30"	21.5"	21.5"	—	234
	Ground Loop	11,900	18.1	9,400	3.6	—	—	—	—					
VS015	Ground Water	17,500	28.8	14,600	5.1	17,400	31.6	14,400	5.4	37.3"	22.5"	22.5"	—	234
	Ground Loop	16,000	19.8	11,600	4.1	16,000	22.3	11,500	4.3					
VS018	Ground Water	23,200	27.5	20,100	5.0	23,200	30.5	19,600	5.3	37.3"	22.5"	22.5"	—	260
	Ground Loop	21,400	20.0	16,300	3.9	21,700	22.2	15,700	4.1					
VS024	Ground Water	28,100	26.0	24,200	4.9	29,400	29.5	24,000	5.1	37.3"	22.5"	22.5"	—	265
	Ground Loop	26,000	19.7	19,400	4.0	27,000	21.6	19,300	4.2					
VS030	Ground Water	31,000	23.4	28,700	4.7	34,000	27.5	29,200	5.1	37.3"	22.5"	22.5"	—	285
	Ground Loop	30,100	18.5	22,300	3.9	31,400	20.4	23,200	4.2					
VS036	Ground Water	40,500	23.5	37,600	4.6	41,600	25.5	36,900	4.8	37.3"	22.5"	22.5"	—	310
	Ground Loop	37,800	18.0	30,200	3.9	38,800	19.2	29,600	3.9					
VS042	Ground Water	46,700	24.4	39,200	4.7	47,700	28.4	38,300	5.0	41.0"	25.0"	27.9"	—	357
	Ground Loop	43,600	18.6	32,000	3.8	44,400	21.2	31,100	4.1					
VS048	Ground Water	54,500	22.6	48,100	4.4	54,900	26.4	47,500	4.8	41.0"	25.0"	27.9"	—	360
	Ground Loop	50,500	17.6	39,600	3.6	51,600	20.1	38,700	3.9					
VS060	Ground Water	63,300	21.3	58,700	4.3	65,500	22.8	58,100	4.6	41.0"	25.0"	27.9"	—	375
	Ground Loop	60,000	16.9	46,900	3.6	61,500	18.2	46,300	3.8					
VS072	Ground Water	74,600	19.1	66,500	4.0	75,600	19.7	66,200	4.1	41.0"	25.0"	27.9"	—	367
	Ground Loop	70,100	15.1	53,200	3.3	70,900	15.7	52,900	3.4					

Model	Type	Cooling BTU				Heating BTU				Dimensional Data			Height with Control Box	Unit Weight (lbs)
		Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth		
Two-Stage Compact Vertical Packaged 1, 3, 4, 5, 6, 7, 8														
VT024	Ground Water	27,600	23.8	19,900	28.4	23,900	4.6	16,800	4.2	37.3"	22.5"	22.5"	—	248
	Ground Loop	25,800	18.6	19,300	24.2	19,400	4.0	14,800	3.8					
VT036	Ground Water	40,000	22.8	29,500	29.8	36,900	4.6	25,700	4.7	37.3"	22.5"	22.5"	—	271
	Ground Loop	37,400	17.7	28,500	25.2	29,500	3.9	22,900	4.2					
VT048	Ground Water	54,700	24.5	40,600	33.0	46,900	4.6	33,600	4.9	41.0"	25.0"	27.9"	—	361
	Ground Loop	51,300	18.9	39,200	27.2	38,300	3.9	30,200	4.3					
VT060	Ground Water	64,200	22.0	48,300	28.2	57,500	4.5	41,300	4.7	41.0"	25.0"	27.9"	—	373
	Ground Loop	61,300	17.6	46,500	23.6	46,300	3.8	36,600	4.2					
VT072	Ground Water	72,800	19.7	56,900	24.5	64,700	4.1	49,600	4.3	41.0"	25.0"	27.9"	—	375
	Ground Loop	68,900	15.8	55,300	21.1	51,800	3.4	44,000	3.9					

Vertical Packaged 1, 3, 4, 5, 6, 7														
YT024	Ground Water	29,200	25.7	22,200	33.6	23,400	5.3	17,500	5.5	46.0"	23.0"	26.5"	53.25"	310
	Ground Loop	27,100	19.9	21,400	28.2	19,000	4.3	15,800	4.8					
YT036	Ground Water	44,300	27.0	32,700	37.4	37,500	5.5	26,600	5.8	54.0"	25.4"	30.5"	61.25"	405
	Ground Loop	41,200	20.9	31,500	31.3	29,100	4.5	23,300	5.1					
YT048	Ground Water	57,100	26.2	44,100	35.3	49,500	5.2	35,900	5.5	54.0"	25.4"	30.5"	61.25"	450
	Ground Loop	53,300	20.2	42,600	29.6	39,900	4.3	32,000	4.9					
YT060	Ground Water	68,700	24.8	51,900	33.4	61,700	4.9	42,900	5.2	58.4"	25.4"	30.5"	65.65"	475
	Ground Loop	64,300	19.3	50,000	28.0	49,200	4.1	37,700	4.6					
YT072	Ground Water	77,600	23.2	60,800	29.5	71,100	4.6	52,100	4.8	58.4"	25.4"	30.5"	65.65"	480
	Ground Loop	71,900	18.0	58,500	24.8	56,200	3.8	45,800	4.4					

Vertical Packaged 1, 3, 4, 5, 6, 7, 8														
XT024	Ground Water	29,600	26.9	22,400	35.0	24,700	5.2	18,500	5.4	56.1"	28"	32.2"	62.5"	415
	Ground Loop	27,200	20.3	21,400	29.1	19,800	4.3	16,600	4.8					
XT036	Ground Water	42,200	24.0	31,100	32.6	37,000	5.1	26,000	5.2	56.1"	28"	32.2"	62.5"	420
	Ground Loop	38,900	18.3	29,900	27.0	29,200	4.2	23,200	4.6					
XT048	Ground Water	53,100	22.1	39,400	29.4	47,400	4.6	33,700	4.9	56.1"	28"	32.2"	62.5"	433
	Ground Loop	49,000	17.1	37,400	24.1	38,200	3.9	29,700	4.3					
XT060	Ground Water	67,700	22.4	50,800	29.8	60,000	4.5	43,300	4.8	60.1"	28"	32.2"	66.5"	466
	Ground Loop	63,000	17.8	49,000	24.9	47,700	3.7	38,600	4.3					
XT072	Ground Water	75,600	21.1	59,200	26.9	70,300	4.3	52,800	4.6	60.1"	28"	32.2"	66.5"	479
	Ground Loop	71,100	17.1	57,500	23.0	55,900	3.6	46,700	4.1					

Unit Performance Data

NEW

NEW

NEW

NEW

Model	Type	Cooling				Heating				Dimensional Data			Unit Weight (lbs)		
		Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth			
Water-to-Water ^{2, 12}												Src. In Src. Out	Load In Load Out		
HP024	Ground Loop	—	—	—	—	23,000	3.1	—	—	21"	27.25"	24.5	1 1/4"	3/4"	248
Water-to-Water ^{2, 5}												Src. In Src. Out	Load In Load Out		
WV060	Ground Loop	43,000	18.4	21,600	25.4	54,600	3.0	27,000	3.9	37.2"	25.1"	25.1"	1"	1"	320
Water-to-Water ^{2, 11, 12, 13}												Src. In Load In	Src. Out Load Out		
WT036	Ground Water	44,300	20.6	34,600	24.5	44,900	3.6	33,300	3.5	24"	26"	34"	1"	1"	280
	Ground Loop	42,000	16.0	33,300	20.6	36,400	3.0	29,200	3.1				1"	1"	
WT048	Ground Water	54,300	19.8	40,800	23.0	55,100	3.6	40,500	3.4	24"	26"	34"	1"	1"	300
	Ground Loop	49,400	15.1	38,800	19.2	44,100	3.0	35,700	3.1				1"	1"	
WT060	Ground Water	62,700	19.0	47,800	21.4	66,200	3.6	49,500	3.5	24"	26"	36"	1"	1"	350
	Ground Loop	57,800	14.6	46,100	18.1	53,200	3.0	44,400	3.1				1"	1"	
WT092	Ground Water	107,100	19.8	78,500	22.2	117,000	3.8	82,300	3.5	24"	30"	48"	1"	1 1/4"	550
	Ground Loop	100,200	15.2	75,700	18.6	92,400	3.1	72,200	3.1				1"	1 1/4"	
WT120	Ground Water	124,400	20.1	—	—	124,900	3.5	—	—	24"	30"	48"	1"	1 1/2"	670
	Ground Loop	114,800	15.4	—	—	97,400	2.8	—	—				1"	1 1/2"	
Water-to-Water ^{2, 11}												Src. In Load In	Src. Out Load Out		
WS036	Ground Water	36,600	23.5	—	—	34,500	3.7	—	—	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	210
	Ground Loop	34,700	18.2	—	—	26,600	3.1	—	—				1 1/4"	1 1/4"	
WS048	Ground Water	56,300	23.3	—	—	54,200	3.9	—	—	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	260
	Ground Loop	52,800	17.7	—	—	42,100	3.1	—	—				1 1/4"	1 1/4"	
WS060	Ground Water	64,900	22.5	—	—	63,300	3.9	—	—	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	300
	Ground Loop	60,000	17.1	—	—	53,000	3.1	—	—				1 1/4"	1 1/4"	
WS072	Ground Water	76,900	21.1	—	—	78,600	4.1	—	—	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	286
	Ground Loop	73,300	17.7	—	—	63,100	3.4	—	—				1 1/4"	1 1/4"	
WS084	Ground Water	88,700	20.8	—	—	80,600	3.5	—	—	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	415
	Ground Loop	83,600	16.1	—	—	74,200	3.1	—	—				1 1/4"	1 1/4"	
WD120	Ground Water	109,100	18.1	65,800	22.0	111,900	3.4	59,000	3.6	27.5"	27"	26.1"	1 1/4"	1 1/4"	465
	Ground Loop	104,600	14.5	63,500	19.8	100,100	2.8	57,500	3.4				1 1/4"	1 1/4"	
Single-Stage Indoor Split ^{1, 3, 4}												Ref. Conn.			
BS018	Ground Water	22,000	25.3	—	—	18,500	4.5	—	—	21"	26"	26"	Liq.	Suct.	190
	Ground Loop	20,400	18.9	—	—	14,600	3.6	—	—				3/8"	5/8"	
Two-Stage Indoor Split ^{1, 3, 4}												Ref. Conn.			
BT024	Ground Water	26,800	22.7	21,000	25.8	23,000	4.2	17,900	4.4	21"	26"	26"	Liq.	Suct.	190
	Ground Loop	24,900	17.3	20,300	22.2	18,200	3.4	15,400	3.9				3/8"	5/8"	
BT036	Ground Water	35,400	21.0	27,700	30.4	36,200	4.5	25,900	4.8	21"	26"	26"	3/8"	5/8"	201
	Ground Loop	35,200	17.1	27,600	26.0	28,700	3.8	22,900	4.3				3/8"	5/8"	
BT048	Ground Water	55,700	26.2	42,100	35.6	45,700	4.6	34,200	5.0	21"	26"	26"	3/8"	3/4"	226
	Ground Loop	51,500	19.9	40,500	28.8	37,300	3.9	30,900	4.4				3/8"	3/4"	
BT060	Ground Water	66,200	22.7	50,900	30.1	57,000	4.2	42,300	4.5	21"	26"	26"	3/8"	7/8"	229
	Ground Loop	62,300	17.6	49,200	25.5	45,900	3.7	37,800	4.1				3/8"	7/8"	
BT072	Ground Water	73,900	20.8	58,800	27.5	64,800	4.0	49,300	4.2	21"	26"	26"	3/8"	7/8"	244
	Ground Loop	69,900	16.4	56,700	23.2	52,000	3.4	43,800	3.8				3/8"	7/8"	
Outdoor Split ^{1, 3, 4, 5, 6}												Ref. Conn.			
RT024	Ground Water	—	—	—	—	—	—	—	—	23.4"	32"	28.8"	Liq.	Suct.	180
	Ground Loop	24,600	15.9	19,600	23.7	17,800	3.4	14,700	3.9				3/8"	7/8"	
RT036	Ground Water	—	—	—	—	—	—	—	—	23.4"	32"	28.8"	3/8"	7/8"	225
	Ground Loop	36,000	16.7	27,800	25.3	27,200	3.8	21,700	4.2				3/8"	7/8"	
RT048	Ground Water	—	—	—	—	—	—	—	—	23.4"	32"	28.8"	3/8"	7/8"	270
	Ground Loop	50,800	18.0	39,000	25.4	36,400	3.9	29,800	4.4				3/8"	7/8"	
RT060	Ground Water	—	—	—	—	—	—	—	—	23.4"	32"	28.8"	1/2"	1 1/8"	270
	Ground Loop	61,500	17.2	47,900	24.1	45,600	3.5	37,000	4.1				1/2"	1 1/8"	

Notes:

- Rated in accordance with AHRI/ISO standard 13256-1, which includes pump penalties
- Rated in accordance with ISO Standard 13256-2, which includes pump penalties
- Heating capacities based on 68.0°F DB, 59.0°F WB entering air temperature
- Cooling capacities based on 80.6°F DB, 66.2°F WB entering air temperature
- Ground Loop entering water temp., Full Load: 32F heating/77F cooling
Ground Loop entering water temp., Part Load: 41F heating/68F cooling
- Ground Water entering water temp., Full Load: 50F heating/59F cooling
Ground Water entering water temp., Part Load: 50F heating/59F cooling
- All Desuperheater connections are 3/4" FPT
- Width excludes filter rack (width with rack is 30.3")
- ST072 with ACD060C is not ENERGY STAR rated for Open Loop Applications
- For the source water fittings, WS open loop only, ZS2T018-072 models use 1" FPT fittings, ZS006-017 models use 3/4" FPT fittings.
- Heating capacities based on 32°F EST & 104°F ELT
Cooling capacities based on 77°F EST & 53.6°F ELT
Entering load temperature over 120°F heating and under 45°F cooling is not permissible
Floor heating is most generally designed for 85°F entering load temperature
There are two IN connections, but only one OUT connection
Model 120 does not meet ENERGY STAR Tier 3 ratings
- Source water loop has 1" double O-ring fittings
- WT060 is the only model available with Side Water Connection option
- VS060 with PSC blower, VS072 with PSC or ECM are not ENERGY STAR qualified models
- Water Loop entering water temp., Full Load: 68F heating/86F cooling
Water Loop entering water temp., Part Load: 68F heating/86F cooling

Model	Type	Cooling with PSC Blower		Heating with PSC Blower		Cooling with ECM Blower Option		Heating with ECM Blower Option		Dimensional Data			Unit Weight (lbs)	
		BTU	EER	BTU	COP	BTU	EER	BTU	COP	Height	Width	Depth		
Single-Stage Compact Horizontal Packaged (PLEASE NOTE PSC AND ECM BLOWER LISTINGS) 1, 3, 4, 5, 6, 7, 10, 15														
ZS006 (208/230V)	Water Loop	6,500	14.6	7,800	5.2					12"	20"	40"	Add 2.4" to width w/ filter rack	140
	Ground Water	7,600	23.2	6,400	4.3	—	—	—	—					
	Ground Loop	6,900	17.1	5,200	3.5	—	—	—	—					
ZS006 (265/115V)	Water Loop	6,200	13.9	7,400	4.9					12"	20"	40"	Add 2.4" to width w/ filter rack	140
	Ground Water	7,200	22.0	6,100	4.1	—	—	—	—					
	Ground Loop	6,500	16.2	5,000	3.3	—	—	—	—					
ZS009 (208/230V)	Water Loop	9,200	14.3	11,700	4.9					12"	20"	40"	Add 2.4" to width w/ filter rack	140
	Ground Water	10,500	22.9	9,500	4.2	—	—	—	—					
	Ground Loop	9,600	16.7	7,500	3.5	—	—	—	—					
ZS009 (265/115V)	Water Loop	8,700	13.6	11,100	4.7					12"	20"	40"	Add 2.4" to width w/ filter rack	140
	Ground Water	10,000	21.7	9,000	4.0	—	—	—	—					
	Ground Loop	9,200	15.9	7,100	3.3	—	—	—	—					
ZS012	Water Loop	11,000	12.5	13,600	4.3					12"	20"	40"	Add 2.4" to width w/ filter rack	140
	Ground Water	12,400	18.7	11,700	3.7	—	—	—	—					
	Ground Loop	11,300	14.1	9,500	3.2	—	—	—	—					
ZS015	Water Loop	14,600	16.3	17,100	5.4	14,600	17.3	16,700	5.5	17"	21"	40"	Add 2.4" to width w/ filter rack	173
	Ground Loop	15,300	19.2	11,100	3.8	15,200	20.3	10,900	3.9					
ZS017	Water Loop	17,000	15.8	21,000	5.3	17,300	17.4	20,400	5.6	17"	21"	40"	Add 2.4" to width w/ filter rack	173
	Ground Loop	18,300	18.6	13,400	3.7	18,100	20.5	13,000	3.8					
ZS018	Water Loop	19,400	15.3	23,000	5.0	19,900	17.3	22,600	5.4	19.2"	21.7"	52"	Add 2.4" to width w/ filter rack	236
	Ground Loop	20,500	18.2	14,400	3.6	20,800	20.5	14,200	3.8					
ZS024	Water Loop	24,100	15.8	29,700	5.0	25,000	17.9	29,300	5.6	19.2"	21.7"	52"	Add 2.4" to width w/ filter rack	236
	Ground Loop	25,200	18.7	18,600	3.7	26,100	21.5	18,600	3.9					
ZS030	Water Loop	29,000	16.2	33,300	5.3	29,500	17.5	33,000	5.7	19.2"	21.7"	52"	Add 2.4" to width w/ filter rack	245
	Ground Loop	30,300	19.1	21,900	3.7	30,700	20.7	21,500	4.0					
ZS036	Water Loop	35,900	15.6	43,400	4.9	36,800	16.8	43,300	5.3	21.2"	21.7"	56"	Add 2.4" to width w/ filter rack	263
	Ground Loop	37,600	18.1	27,800	3.7	38,400	19.5	27,600	4.0					
ZS042	Water Loop	41,700	16.9	50,400	5.4	42,500	17.7	49,600	5.4	21.2"	21.7"	56"	Add 2.4" to width w/ filter rack	280
	Ground Loop	43,400	19.8	32,800	3.9	44,100	21.1	32,200	4.1					
ZS048	Water Loop	46,800	15.4	59,300	4.6	48,100	16.3	58,100	4.9	21.2"	21.7"	56"	Add 2.4" to width w/ filter rack	293
	Ground Loop	48,500	17.8	38,500	3.6	50,400	19.1	37,800	3.8					
ZS060	Water Loop	58,400	15.4	75,700	4.9	59,300	17.0	74,700	5.3	21.2"	24"	61"	Add 2.4" to width w/ filter rack	303
	Ground Loop	60,500	17.8	49,200	3.8	60,700	19.5	48,200	4.0					
ZS072	Water Loop	68,600	15.1	88,400	4.6	69,700	15.5	88,400	4.7	21.2"	24"	61"	Add 2.4" to width w/ filter rack	312
	Ground Loop	70,600	17.2	57,400	3.5	72,100	17.7	56,600	3.7					

Model	Type	Cooling BTU				Heating BTU				Dimensional Data			Unit Weight (lbs)	
		Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth		
Two-Stage Compact Horizontal Packaged 1, 3, 4, 5, 6, 7, 10, 15														
ZT024	Water Loop	25,600	17.0	18,700	19.3	30,000	5.5	21,300	6.0	19.2"	21.7"	52"	Add 2.4" to width w/filter rack	236
	Ground Loop	26,800	19.8	20,700	28.8	18,100	4.0	14,900	4.3					
ZT030	Water Loop	30,600	15.4	22,800	17.4	36,000	5.0	26,100	5.3	19.2"	21.7"	52"	Add 2.4" to width w/filter rack	245
	Ground Loop	32,000	18.0	24,800	24.9	22,600	3.7	18,700	4.0					
ZT036	Water Loop	36,500	17.0	26,100	19.5	43,300	5.3	30,800	6.0	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	263
	Ground Loop	38,200	19.9	28,900	29.8	27,600	4.1	21,200	4.4					
ZT042	Water Loop	41,000	16.5	30,400	17.5	48,400	4.6	35,200	5.0	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	280
	Ground Loop	42,600	19.1	33,100	26.2	31,500	3.7	25,800	4.0					
ZT048	Water Loop	47,600	15.8	36,200	17.8	58,300	4.9	42,000	5.5	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	293
	Ground Loop	49,800	18.3	39,700	26.6	37,900	3.9	29,600	4.3					
ZT060	Water Loop	59,400	16.3	42,900	18.3	74,600	5.1	51,400	5.8	21.2"	24"	61"	Add 2.4" to width w/filter rack	303
	Ground Loop	61,200	18.7	47,300	26.9	48,100	3.9	34,200	4.1					
ZT072	Water Loop	68,100	15.7	53,400	17.8	88,400	4.8	66,600	5.6	21.2"	24"	61"	Add 2.4" to width w/filter rack	312
	Ground Loop	70,400	18.0	57,100	25.2	57,900	3.8	47,600	4.2					

Horizontal Packaged 1, 3, 4, 5, 6, 7														
HT024	Ground Water	25,700	21.6	19,400	25.8	24,400	4.6	17,600	4.8	22"	26"	54"	Add 2.4" to width w/filter rack	330
	Ground Loop	23,700	17.6	18,300	22.9	18,900	3.8	15,500	4.2					
HT036	Ground Water	37,500	21.4	27,600	27.3	36,600	4.7	25,600	4.9	22"	28"	66"	Add 2.4" to width w/filter rack	385
	Ground Loop	35,400	16.8	27,100	23.5	29,200	3.9	22,800	4.4					
HT048	Ground Water	52,200	23.2	39,400	29.7	46,300	4.6	33,000	4.9	24"	30"	68"	Add 2.4" to width w/filter rack	435
	Ground Loop	49,500	18.2	38,300	24.9	37,200	3.9	29,700	4.3					
HT060	Ground Water	64,100	22.0	48,500	28.1	57,500	4.4	40,700	4.6	24"	30"	68"	Add 2.4" to width w/filter rack	460
	Ground Loop	60,400	17.5	47,000	23.8	46,400	3.7	36,700	4.1					

Unit Performance Data

Model	Type	Cooling BTU				Heating BTU				Dimensional Data				Unit Weight (lbs)
		Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth		
Combination Series 1, 3, 4, 5, 6, 7, 8													Height with Control Box	
CT024	Ground Water	28,900	26.0	22,100	32.7	24,300	5.1	17,700	5.0	56.1"	28"	32.2"	62.5"	415
	Ground Loop	26,500	20.0	20,900	27.3	19,700	4.2	15,700	4.5					
CT036	Ground Water	41,700	23.5	30,400	31.9	36,700	5.0	25,600	5.2	56.1"	28"	32.2"	62.5"	420
	Ground Loop	38,600	18.3	29,100	26.8	28,600	4.1	22,400	4.6					
CT048	Ground Water	53,100	21.8	39,400	29.4	46,700	4.6	33,700	4.9	56.1"	28"	32.2"	62.5"	435
	Ground Loop	49,000	17.1	37,400	24.1	38,000	3.9	29,700	4.3					
CT060	Ground Water	65,600	21.7	49,800	29.0	58,500	4.4	41,500	4.7	60.1"	28"	32.2"	66.5"	535
	Ground Loop	61,300	17.4	48,000	24.4	46,500	3.7	36,400	4.1					
CT072	Ground Water	75,100	20.2	59,100	25.5	70,300	4.2	52,600	4.5	60.1"	28"	32.2"	66.5"	550
	Ground Loop	70,500	16.2	57,000	22.0	55,900	3.6	46,500	4.0					

Notes:

- Rated in accordance with AHRI/ISO standard 13256-1, which includes pump penalties
- Rated in accordance with ISO Standard 13256-2, which includes pump penalties
- Heating capacities based on 68.0°F DB, 59.0°F WB entering air temperature
- Cooling capacities based on 80.6°F DB, 66.2°F WB entering air temperature
- Ground Loop entering water temp., Full Load: 32F heating/77F cooling.
Ground Loop entering water temp., Part Load: 41F heating/68F cooling
- Ground Water entering water temp., Full Load: 50F heating/59F cooling
Ground Water entering water temp., Part Load: 50F heating/59F cooling
- All Desuperheater connections are 3/4" FPT
- Width excludes filter rack (width with rack is 30.3")
- ST072 with ACD060C is not ENERGY STAR rated for Open Loop Applications
- For the source water fittings, WS open loop only, ZSST018-072 models use 1" FPT fittings, ZS006-017 models use 3/4" FPT fittings.
- Heating capacities based on 32°F EST & 104°F ELT
Cooling capacities based on 77°F EST & 53.6°F ELT
Entering load temperature over 120°F heating and under 45°F cooling is not permissible
Floor heating is most gernally designed for 85°F entering load temperature
There are two IN connections, but only one OUT connection
Model 120 does not meet ENERGY STAR Tier 3 ratings
- Source water loop has 1" double O-ring fittings
- WT060 is the only model available with Side Water Connection option
- VS060 with PSC blower, VS072 with PSC or ECM are not ENERGY STAR qualified models
- Water Loop entering water temp., Full Load: 68F heating/86F cooling
Water Loop entering water temp., Part Load: 68F heating/86F cooling

Model	Size (tons)	Dimensional Data			Return Air Opening		Unit Weight (lbs)
		Height	Width	Depth			
MP Series Multi-Position DX Air Handlers					Width	Depth	
MPD024	2	43"	17.625"	21"	15.5"	19.75"	130
MPD036	3	48"	21.125"	21"	19.75"	19.75"	150
MPD060	4 - 5	58.875"	24.625"	21.75"	23.5"	20.75"	200
MPD072	6	58.875"	24.625"	21.75"	23.5"	20.75"	205
MP Series Multi-Position Hydron Air Handlers					Width	Depth	
MPH024	2	43"	17.625"	21"	15.5"	20.25"	135
MPH036	3	48.25"	21.125"	21"	19"	20.25"	165
MPH048	4	58.75"	25"	22"	22.25"	20.5"	210
MPH060	5	58.75"	25"	22"	22.25"	20.5"	215

Model	Size (tons)	Dimensional Data					Unit Weight (lbs)
		Height	Width	Depth			
AC Series DX “A” Coils					Liquid	Suction	
ACD024	2	14.5”	16.625”	19”	3/8”	3/4”	27
ACD036	3	18.5”	19.625”	19”	3/8”	3/4”	34
ACD060	4 - 5	27.875”	23.75”	20.5”	3/8”	7/8”	52
AC Series Hydronic “A” Coils					Water Connection Size (Sweat “L” Copper)		
ACH024	2	18.5”	16.63”	19”	3/4”	3/4”	36
ACH036	3	21”	19.63”	19”	3/4”	3/4”	43
ACH060	4 - 5	28”	23.92”	20.5”	3/4”	3/4”	64
AC Series DX Cased “A” Coils					Liquid	Suction	
MCD024	2	20”	17.5”	21”	3/8”	3/4”	47
MCD036	3	24”	21”	21”	3/8”	3/4”	58
MCD060	4 - 5	34”	24.5”	21.5”	3/8”	3/4”	89
AC Series Hydronic Cased “A” Coils					Water Connection Size (Sweat “L” Copper)		
MCH024	2	20”	17.5”	21”	3/4”	3/4”	56
MCH036	3	24”	21”	21”	3/4”	3/4”	68
MCH060	4 - 5	34”	24.5”	21.5”	3/4”	3/4”	101

The Best Geothermal Warranty!

The highest quality product should have a warranty that reflects confidence in its design and construction. Hydron Module strives to embody this principle in the way we stand behind our products. All Hydron Module geothermal systems are backed by Enertech Global, the manufacturer of the Hydron Module brand. The standard residential warranty includes parts and labor coverage, plus coverage on select accessories. That's peace of mind!

At Enertech, quality assurance is one of the guiding principles in the way we do business. We realize that successful business relationships are earned by providing superior products backed by the highest quality technical and customer support.



The **10/10/5+5 Standard Residential Warranty** includes...

- **10-Year All Internal System Component Parts** warranted against defects in material and workmanship
 - Compressor
 - Water-to-refrigerant heat exchanger
 - Air-to-refrigerant heat exchanger (not applicable on water-to-water units)
 - All internal refrigerant circuit parts
 - All internal water circuit parts
 - All internal controls/electrical parts, including fan motor if applicable
 - Internal electric heater
 - Desuperheater pump
- **10-Year Select Accessories**
 - Hydron Module thermostat (one-time replacement)
 - Flow center (cabinet and pump motors) purchased through Enertech
 - EWC Zoning (panel and dampers) purchased through Enertech
 - Internal auxiliary heater
- **5-Year Limited Labor Allowance** on all of the above listed items including select accessories, plus a *FREE additional 5-Year Limited Labor Allowance* (years 6-10) when product is registered online or via mail-in form within 60 days of installation.

Plus...

- **An Optional Limited Lifetime Microchannel Air Coil and Compressor Warranty** covers the all-aluminum microchannel air coil heat exchanger and compressor to the original homeowner. Coverage is for one-time replacement, parts only, and is non-transferrable. Product must be registered online or via mail-in form within 60 days of installation.
- Optional warranty reductions available; 5/5/5, 10-Year Parts Only, or ENERGY STAR minimums. The Limited Lifetime Warranty coverage option is not available with reduced warranty coverage options.

* HP Unit: 5 Year all unit parts, 5 Year select accessories, 1 Year labor allowance.

Consult price book for complete warranty details



Geothermal University® curriculum is developed from Enertech's history and reputation as a leader in the geothermal heating and cooling industry. Stemming from the grass roots of geothermal technology, backed by manufacturing expertise, and supported by field experience, courses are designed to provide the knowledge and confidence of designing, selling, installing and servicing Enertech made geothermal systems.



Geothermal University offers training for the complete geothermal industry. IGSHPA certification and NATE continued education hours are incorporated into our curriculum along with specific design and sales courses for Enertech manufactured equipment.

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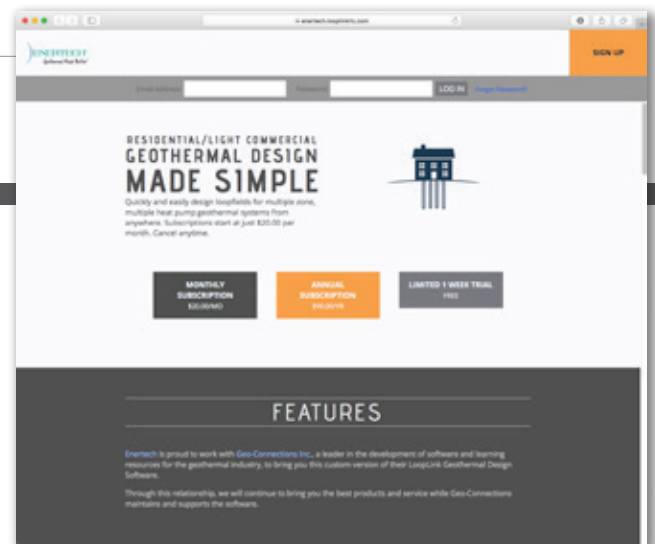
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Enertech Geothermal Design Software is a powerful, web-based ground loop design tool that enables you to design loopfields for multiple zone geothermal systems faster and more accurately than ever before.

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Enertech is proud to work with Geo-Connections Inc., a leader in the development of software and learning resources for the geothermal industry, to bring you this custom version of LoopLink RLC.

Through this relationship, we will continue to bring you the best products and service while Geo-Connections maintains and supports the software.



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Design with confidence using the only software built on the calculation methods outlined in the 2011 IGSHPA Residential/Light Commercial Design Manual.



Multi-Zone/Multi-Heat Pump Designs

Take on bigger residential projects than ever before with the only residential software that allows up to 10 zones with any number of heat pumps per zone.



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Present your customers with professionally designed reports that take seconds to generate and can be saved, emailed or printed with the click of a button.



Detailed Economic Analysis

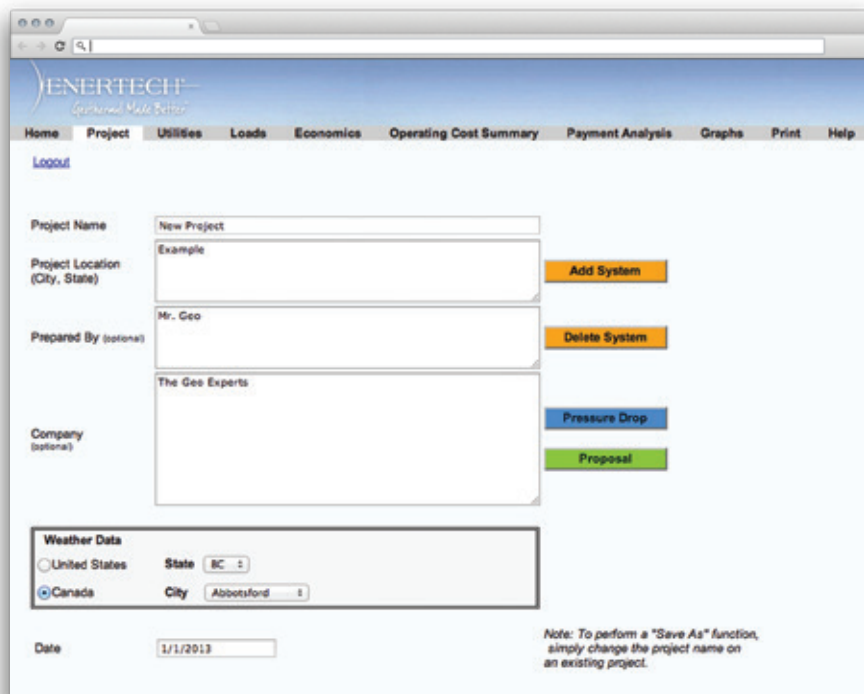
Accurate cost estimates are just as important as getting the design right which is why we provide a comprehensive set of economic evaluation tools enabling you to show your customers:

- Simple Payback
- Operating Cost Comparisons
- Ownership Cost Breakdowns
- Accrued 30 Year Savings



Support From Experts

Everyone that uses our software has access to the Geo-Connections support team of experienced system designers and engineers at no extra charge.



No other software has as many features.

Even more important, the loop sizing portion uses “pure” IGSHPA algorithms, not manufacturer-adjusted loop sizing formulas. The ease of use and configuration ability provides users with an accurate system analysis at a low annual maintenance fee, which includes free updates.

GeoAnalyst is continually updated with new features. 98% furnaces were recently added, as were 21 SEER air conditioners. Changes in equipment, enhanced features, and other usable upgrades are instantly available in the new online version. There is no longer a need to update the software.


Features

- Ability to compare up to 5 other conventional systems
- Allows the user to save multiple utility files
- I.P. or S.I. utility cost choices (e.g. \$/gallon or \$/liter)
- 14 pre-configured ground loop choices, plus user-defined horizontal loop and open loop (well water)
- “Auto Size” option for sizing loops based upon minimum/maximum entering water temperature
- Economic analysis with simple payback, cashflow analysis, and financing options. Has the ability to include rebates/credits and print graphs
- Choice of HDPE, PEX or user-defined pipe
- Choice of ASHRAE, EPRI or user-defined soil types
- Includes calculations for water-to-water heat pumps and combination units (water-to-water/water-to-air) for applications like radiant floor heating
- Bin data report and balance point calculation
- Includes the latest conventional equipment for comparisons (up to 21 SEER air conditioners/heat pumps and 98% efficiency furnaces)
- Comprehensive system reports for geothermal and conventional selections
- Pressure drop calculation module for sizing flow center pumps (central pumps or pump(s) for each unit)
- Calculates loop flushing requirements, antifreeze requirements, and Reynolds number
- Sales proposal module for creating a consumer-friendly sales proposal to explain the benefits of geothermal vs. the other compared systems
- All new bill of material generator simplifies the quoting and ordering process
- Allows reports to be customized with your company logo and contact information
- Dual-fuel system comparisons for geothermal and air-to-air heat pumps
- “Save as Default” option to use saved local conditions for a new project

Ground Loop Sizing and Operating Cost Analysis

Sample Report

GeoAnalyst ground loop sizing and operating cost analysis is very intuitive with drop-down menus, and pop-up windows. All pre-configured loops have a picture of the cut-away section to help the designer understand the correct inputs. The “Auto Size” option sizes loops based upon the minimum and maximum entering water temperature selected. The designer may also key in the loop length, and allow the software to calculate the minimum and maximum loop temperatures.



Geothermal Design & Application Software

GeoAnalyst® Geothermal System Report

9/21/2012

System 1 - Geo System
New Project
Example
Weather Data Location: Abbotsford BC

System 1 - Geo System
New Project
Example
Weather Data Location: Abbotsford BC

<p>Heating</p> <p>Annual Heating Load: 50.5 MMBtu</p> <p>Electricity (Tetco): 3949 kWh</p> <p>Electricity (Auxiliary): 2 kWh</p> <p>% by Tetco: 100.0 %</p> <p>Average Efficiency: 3.75 COP</p> <p>Annual Cost: \$395</p> <p>Hot Water</p> <p>Annual DHW Load: 5.2 MMBtu</p> <p>Electricity: 642 kWh</p> <p>% by Geothermal: 65.6 %</p> <p>Average Efficiency: 2.38 COP</p> <p>Annual Cost: \$64</p>	<p>Cooling</p> <p>Annual Cooling Load: 4.1 MMBtu</p> <p>Electricity (Tetco): 195 kWh</p> <p>Average Efficiency: 21.1 Btu/Watt</p> <p>Annual Cost: \$20</p>
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Estimated Annual Operating Costs

Heating: \$395

Cooling: \$20

Hot Water: \$64

Total^{1,2,3} \$479

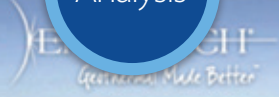
<p>Design Heating Load: 55714 Btu/hr</p> <p>Indoor Design Temperature: 70 °F</p> <p>Outdoor Design Temperature: -12 °F</p> <p>Heating Electric Rate: 0.10 \$/kwh</p> <p>Hot Water Electric Rate (Htg): 0.10 \$/kwh</p> <p>Winter Peak Electrical Demand: 2.74 kW</p>	<p>Design Cooling Load: 21666 Btu/hr</p> <p>Indoor Design Temperature: 75 °F</p> <p>Outdoor Design Temperature: 95 °F</p> <p>Cooling Electric Rate: 0.10 \$/kwh</p> <p>Hot Water Electric Rate (Clg): 0.10 \$/kwh</p> <p>Summer Peak Electric Demand: 1.54 kW</p>
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<p>Model: XT036 XT Series with hot water generator</p> <p>Water Heater: Electric</p> <p>Auxiliary Heat: 0.30 kW</p>	<p>Emergency Heat: 8.56 kW</p> <p>Balance Point: 13 ° F</p>
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Loop Type / Soil: Two Vertical U-Tubes,

<p>Deep Earth Temp: 52 °F</p> <p>Annual Temperature Swing: 17 °F</p> <p>Phase Shift: 39 Days</p> <p>Soil Conductivity: 1.4 Btu/hr-ft-F</p> <p>Soil Diffusivity: 0.04 ft²/hr</p> <p>Pipe Conductivity: 0.226 btu/hr-ft-F</p>	<p>and hot water. Base electric use (electric use other than heating, cooling cycle. Total annual utilities equals heating, cooling and hot water costs plus rate due to the variability of living habits, weather, and system installation. (see Ground Source Heat Pump Association) for ground loop sizing.</p>
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Analysis



Geothermal Make Better

System 1 - Geo System

Loop Information

Loop Type: Pond Mat Loop

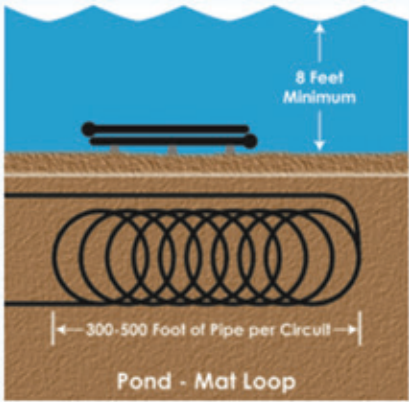
Pump: UP26-99

Entering Water Temperature

Desired

Maximum (Summer) 100

Minimum (Winter) 25



8 Feet Minimum

← 300-500 Foot of Pipe per Circuit →

Pond - Mat Loop

Geo Unit

Series: XT Series

Unit: XT036

Backup Heating

Electric: Electric

ECM Blower is assume for all Geo Units

Hot Water

Electric: Electric

DesuperHeater ☒

Calculate
Return to Project Page
Help

Visit
www.geoanalyst.net
to try the demo or
to register - or call
618-664-5860 to
learn more!

Comprehensive reports provide both operating cost information and technical data. Design conditions, equipment selection, and loop sizing information is provided in the technical data sections. At the top of the report, a company logo may be imported to customize the look of the print-outs.

Hydron Module Marketing

Literature

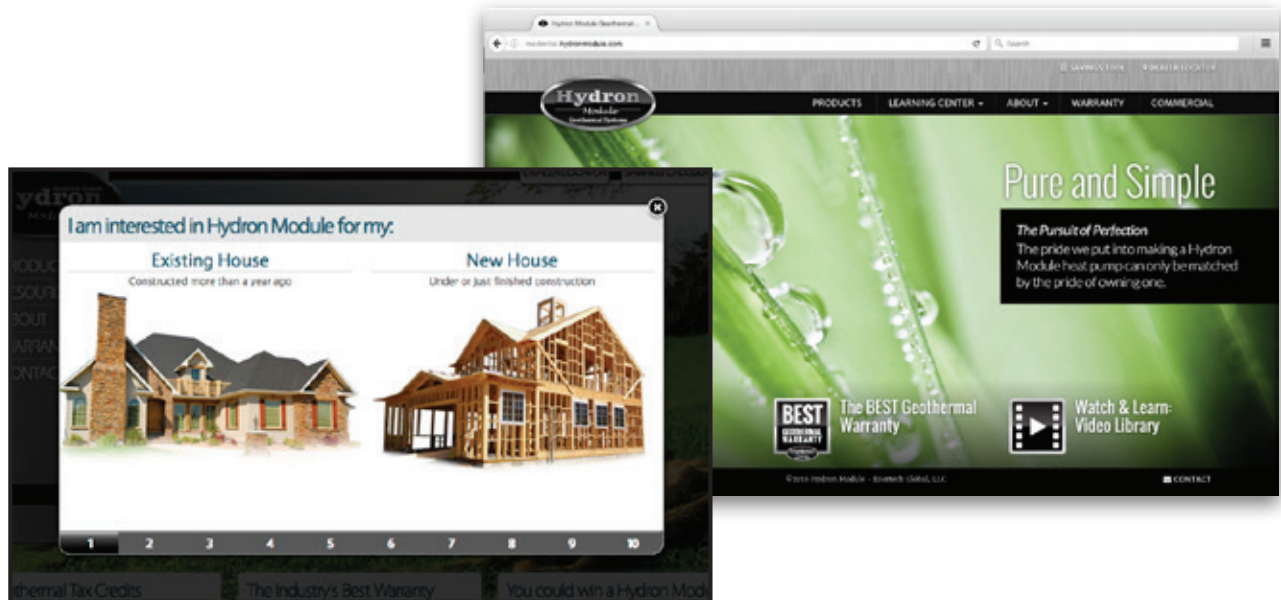
We offer a complete assortment of Hydron Module consumer, technical and dealer literature to assist with every step of the sales process. Available in both printed and electronic format, materials include general geothermal educational pieces to product-specific technical brochures.

- Homeowner Geothermal Guide
- Consumer Product Brochures
- Technical Product Brochures
- Engineering Data and Installation Manuals



Savings Tool

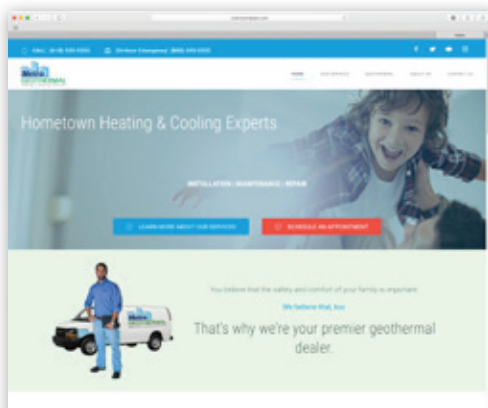
The Savings Tool guides homeowners through a step-by-step process that shows the energy cost comparison of a geothermal system over conventional equipment.



Marketing Materials

To further enhance the efforts of Hydron Module distributors and dealers, we have a wide array of merchandising, point-of-purchase and sales tools available. A dedicated promotional and trade show web store makes brand support easy. Elements like homeowner DVDs, fleet decals, showroom posters and training tools are designed to educate consumers and installers alike. New materials are in constant development.

- Print Advertising
- Radio Scripts
- Banners
- Fleet/Vehicle Graphics
- Apparel
- Giveaways
- Trade Show Graphics Program



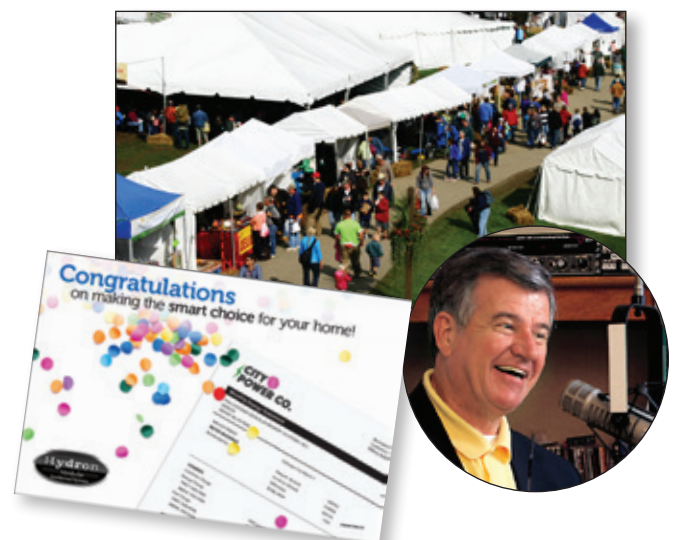
Dealer Website Program

Putting your best foot forward on the web and increasing brand awareness is easy and convenient with our Dealer Website Program. In fact, a geothermal-focused dealer website can be online and ready for homeowners just by answering a few simple questions. After completing, a team of designers and writers will organize the information into a beautifully impressive website featuring your business.

Lead Generation

Hydron Module has drastically increased its lead generation and lead nurturing efforts in recent years, implementing advance tracking software to ensure each lead gets followed. We're always investigating new avenues to generate strong homeowner leads to provide to Hydron dealers.

Lead generation tools include company websites, agricultural fairs, consumer magazine ads, homeowner communications, Doug Rye radio, home shows and green energy websites.



Communications

At Enertech Global, we believe good communication can turn an ordinary relationship into an extraordinary one. That's why we make it easy for you to stay in touch and receive the information you need to effectively run your business. In fact, with Enertech, everything you need to be successful is just a click away!



Secure Website

With our secure website all the essentials are right at your fingertips. It features a convenient newsfeed displaying the most recent updates and information, plus you'll find a variety of online sales and marketing tools, including pricing, literature and branding support materials. The site also features a Service Parts Generator, as well as a search box tool to help you find the information you need quickly.

Email Communications

We send a monthly newsletter called "In the Loop," which is a great way to quickly catch up every month on new and exciting initiatives at Enertech. In the Loop newsletter articles cover everything from upcoming events and product to important deadlines and price book update information.



Social Media

As a people-centric company, we understand the power and importance of social media. For industry news, company updates, and ideas on how to build your business, follow us on Facebook, Twitter, Instagram, LinkedIn, and our blog. Check our social pages regularly and never miss out on important Enertech Global company information.

Hydron Module Video

We know that sometimes seeing is believing. Help your customers learn more about the geothermal process, our family of products and the Hydron Module brand with our growing library of online videos. All of our video content is available for free, easy viewing in the Video Library at hydronmodule.com, and can be shared with your customers in a few quick clicks.



Financing



The market place has shifted, if you are not offering financing to all of your clients, you're missing out and so are we. To be successful, here's what Top Retail HVAC Dealers Know!

- *By offering retail financing or “bridge” loans, their closing rates increase 25%!*
- *Average sell price is 20-25% HIGHER!*
- *Financed jobs typically include higher-efficiency and more accessories*

Myth Busters! The Truth about Retail HVAC Financing:

- **Most people pay with Cash: FALSE!**
The AVERAGE American has about \$3800.00 in Savings.
- **Nobody needs financing: FALSE!** Fifty percent of home improvement jobs OVER \$5,000.00 are financed!
- **Nobody Offers Financing: FALSE!**
The top salesmen in our industry sell financing on sixty to seventy percent of their jobs.
- **Nobody Asks Me for Financing: TRUE!**
This is often the case, people will accept an offer of financing, but are reluctant to ask for it.
- **People are not looking for long-term loans: TRUE!** (mostly) Most loans are paid in full within 6 or 12 month! Consumers use the short-term loan as a “Bridge” loan until they receive tax credit rebates, or investment returns.
- **The program is complicated with lots of paperwork: FALSE!** The consumer application is “paperless” and dealer funding is fast! It allows a portion of the loan to be paid upfront as a down payment to the dealer.

Our Most Popular Loans

- Bridge (or SAME-AS-CASH) Loans
- Reduced Interest Loan. YOU select the rate and term!
- Commercial Lease Program

GEOHERMAL

Ground Loop Field

The heat exchanger, also known as the loop system, captures the stored solar energy in the ground and delivers it back to the geothermal system in the house.

The loop system is the heart of geothermal technology. There are four different types of loops.

Installing a geothermal loop system is like getting up to a 70% discount on energy for the life of the home.

Vertical loops are used mainly when land area is limited in retrofit applications of existing homes. A drilling rig is used to bore holes at of depth of 150 to 300 feet per ton. A U-shaped coil of high density pipe is inserted into the bore hole. The holes are then backfilled with a sealing solution.

Horizontal loops are commonly used when adequate land area is available. Loop installers use excavation equipment such as trenchers, backhoes and track hoes to dig trenches approximately 6 to 8 feet deep. Trench lengths range from 100 to 300 feet per ton, depending on the loop design and application. Directional bore machines can also be used.

Pond loops are an option if a large body of water is available within approximately 200 feet of the home. A $\frac{1}{2}$ acre, 10 to 12 foot deep body of water is usually adequate to support the average home. The system uses coils of pipe typically 300 to 500 feet in length. The coils are placed in and anchored at the bottom of the body of water.

Open loop systems can be installed if an abundant supply of high quality well water is available. A typical home will require a well producing 4 to 8 gallons of water per minute. A proper discharge area such as a river, drainage ditch, stream, pond, or lake must be present. Check for local restrictions before selecting a specific discharge method.

Vertical Loop



Horizontal Loop



Pond Loop



Open Loop





Greenville, IL - Mitchell, SD

info@enertechgeo.com
www.hydronmodule.com

Industrial, institutional and commercial buildings often have unique heating and cooling needs. Hydron Module has a complete line of commercial models to fit most any project. Visit commercial.hydronmodule.com to learn more!

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SERIES**



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