



Residential Product Catalog



HEAT PUMPS AND ACCESSORIES



EnertechUSA.com

Our Mission

To revolutionize the way homes and communities are heated and cooled by developing and manufacturing products that foster healthy, comfortable, and sustainable living environments for all.



Our Core Values

INTENTION

We aim to set a clear direction and consciously align our actions with our goals.

INTEGRITY

We are committed to conducting ourselves in an honest, respectful and straightforward manner.

CONTINUOUS IMPROVEMENT

We aspire for excellence in all aspects of our business.

Our Philosophy

Enertech Global was founded in 1996 as a family-owned and operated geothermal heat pump distributor. Since then, we've evolved to a manufacturer, delivering award-winning innovation and the highest quality products, from design to build. When you install an Enertech-built heat pump properly, you can be confident it will perform as it should. We've outgrown our family-owned status, but Enertech is still and always will be family-operated, with each employee and customer a valued member of our family. When you're part of the Enertech family, you experience:

PARTNERSHIP:

Our relationship is based on mutual respect and success. For us to thrive, we must help you thrive. This may mean going on-site with you for a job you're trying to secure or offering training to your employees, to help them become the best they can be.

PASSION:

Our employees are our best asset. We work with passion from product development to taking orders, selecting accessories, and building Enertech heat pumps. Visit our factory in Mitchell, SD, to see firsthand why our products are exceptional.

LOYALTY:

We are committed to earning the trust and allegiance of our product installers and distributors. We firmly believe that they deserve our highest quality and service, which positions us uniquely to enhance the profitability of their businesses.

CUSTOMER DRIVEN:

We listen. We act. Our decisions are always guided by our customers. You can experience this by being a part of our Dealer and Distributor Councils, which meet throughout a new product design and build to ensure we're including features and benefits that enhance your business and your customer's experience.

SOLUTION-ORIENTED:

Our customer's best interest is always our first priority. When needed we will work closely with our customers to find creative solutions, even if this means working outside our normal processes to ensure a mutually beneficial resolution.

QUALITY:

Our team is committed to manufacturing and providing the highest quality products. We prioritize customer feedback and ensure thorough testing of each unit. Enertech's

equipment testing is the most robust in the industry, featuring a computerized run test station with helium leak detection and waterside decay testing. We test units in all heating and cooling modes to meet our high standards.

To demonstrate our commitment, Enertech is certified to ISO 9001, ISO 14001, and ISO 45001 quality and environmental management standards.



FORWARD THINKING:

We believe in contributing to the well-being of communities, cities, and countries where we do business. We aim to improve the global atmosphere and environment, ensuring you can trust a company that prioritizes sustainability over profit.

EXPERIENCE THE ENERTECH DIFFERENCE.

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.



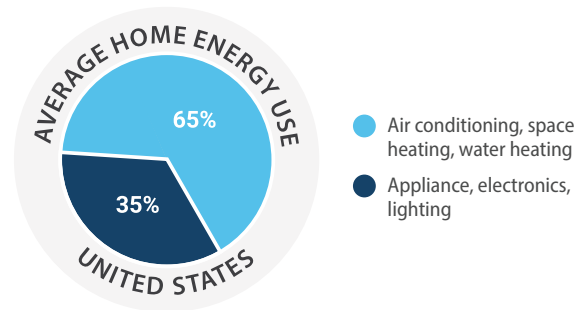
“Never will you find a greater comfort and peace of mind than with an Enertech geothermal heat pump. Our team is committed and has the vision to redefine heating and cooling systems for the world.”

—Tim Wright
CHIEF OPERATING OFFICER

Why You Should Go All-In on Geothermal

HOMEOWNERS NEED IT

Heating, cooling, and hot water dominate a home’s energy use, accounting for approximately 65 percent of energy used. As a renewable technology that is up to 500 percent efficient and saves 30 to 70 percent on heating, cooling, and hot water costs, geothermal is the solution to meet the needs of today’s homeowners.



INCENTIVES & FINANCING

There’s a 30% federal tax credit for residential and commercial geothermal systems, and many local municipalities, state entities, and utilities offer further rebates and incentives. Visit dsire.use.org or we’ll help you contact your local utility or electric cooperative to find out more about programs in your area – or we can work to create one.



Some Canadian provinces offer incentives for geothermal. Since these offerings vary by Province, check rebates/ incentives at ncran.gc.ca for more information.

Enertech has partnered with Regions Bank to provide financing options for your customers through Enertech Finance.

Some of the key benefits on Enertech Finance include:

- Multiple funding disbursements (For qualifying contractors)
- Three easy paperless application methods
- Fast payment — usually within 24 hours via ACH transfer
- Unsecured loans up to \$100K
- No collateral, no liens at origination
- Multiple loan products available
- Marketing and training support
- Personalized support from a dedicated relationship manager



Visit info.enerbank.com/enertech for more information.

Enertech Geothermal Product Matrix






PRODUCT FEATURES	YT Models	VS/VT Models	ZS/ZT Models	BS/BT Models	WV Models	WT Models	WS Models
Function	Forced Air	Forced Air	Forced Air	Split System	Hydronic	Hydronic	Hydronic
Cabinet Configuration	Multi-Positional Vertical	Compact Vertical	Compact Horizontal	Indoor Split	Water-to-Water	Water-to-Water	Water-to-Water
Compressor Stages	Two	VS: Single VT: Two	ZS: Single ZT: Two	BS: Single BT: Two	Variable	Two	Single
Sizes	2 - 6 Tons	1/2 - 6 Tons	1/2 - 6 Tons	1 1/2 - 6 Tons	5 Ton	3 - 5 Tons	3 - 7 Tons
Refrigerant	R-454B	R-454B	R-454B	R-454B	R-454B	R-454B	R-454B
Heating Efficiency (COP)* GLHP Part Load, Two-Stage Unit GLHP Full Load, Single-Stage Units	Up to 4.9	Up to 4.6	Up to 4.3	Up to 4.3	Up to 3.8	Up to 3.5	Up to 3.3
Cooling Efficiency (EER)* GLHP Part Load, Two-Stage Units GLHP Full Load, Single Stage Units	Up to 29.5	Up to 26.6	Up to 26.6	Up to 28.9	Up to 21.6	Up to 20.6	Up to 17.7
Copper Coaxial	Yes	Yes	Yes	Yes	N/A	Yes	N/A
Cupronickel Coaxial	Yes	Yes	Yes	Yes	N/A	Yes	N/A
Stainless Steel Brazed Plate Heat	N/A	N/A	N/A	N/A	Yes	N/A	Yes
HX Insulation	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed
Air Coil	Aluminum Micro-Channel	Aluminum Micro-Channel	Aluminum Micro-Channel	N/A	N/A	N/A	N/A
Desuperheater	Optional	Optional	Optional	Optional	Indirect Hot Water	Optional	Optional
Auxiliary Heat	One-Piece Internal	External Close Coupled (Excluding VS006-012)	External Close Coupled (Excluding ZS006-012)	N/A	Internal Immersion Heater/Dual Fuel Options Available	N/A	N/A
Blower	Variable Speed ECM	PSC: VS006-VS018 ECM: All, excluding VS006-VS012	PSC: ZS006-ZS018 ECM: All, excluding ZS006-ZS012	N/A	N/A	N/A	N/A
Selectable CFM	Yes	Yes	Yes	N/A	N/A	N/A	N/A
Freeze Protection	Digital	Digital	Digital & Flow Switch	Flow Switch	Digital & Flow Switch	Flow Switch	Digital
Controls	Digital	Digital	Digital	Digital	Advanced Digital	Digital	Digital
Water Fittings	Double O-ring	Double O-ring	3/4" FPT - ZS006-017 1" FPT - ZS/ZT018-072	Double O-ring	Double O-ring	Double O-ring - Source 1" FPT - Load	1.25" MPT
Air Handler Match	N/A	N/A	N/A	Yes	Yes	Yes	Yes
"A" Coil Match	N/A	N/A	N/A	Yes	Yes	Yes	Yes
EPIC Connected Controls Powered by myUplink	Yes	Yes (VT)	Yes (ZT)	Yes	Yes	TBA	TBA

* See pages 20 - 23 for extended performance data



YT | 2-STAGE Multi-Position Vertical Packaged Unit

Our Best Selling Product!

-  Forced air heating and cooling
-  Domestic hot water assist
-  Optional EPIC connected controls



UNIT FEATURES

5 Sizes: 024, 036, 048, 060, 072

Seamless Connectivity with EPIC connected controls

- Energy monitoring
- Compatible with most heat pump thermostats and WiFi networks
- Intuitive, future-proofed design

All-Aluminum Micro-Channel Air Coil (MCHX)

Elastomeric compressor isolation mounting suspension

Field selectable Multi-Positional return air pattern

Optional Factory Installed soft start kit

Copeland Two-Stage Scroll Compressor

Factory supplied discharge and return duct flanges

Optional deluxe filter rack (allows 1" or 2" filters)

Composite, anti-microbial drain pan

Eye Level easy to access advanced digital controls with status light viewing window

ECM Blower Motor

Double O-Ring Water Fittings

3/4" FPT Hot Water Generator (HWG) connections

Copper or Optional Cupronickel Heat Exchanger

Optional cabinet-mounted Flow Center (YT024 excluded)



WARRANTY

Standard 10-5 Year Warranty

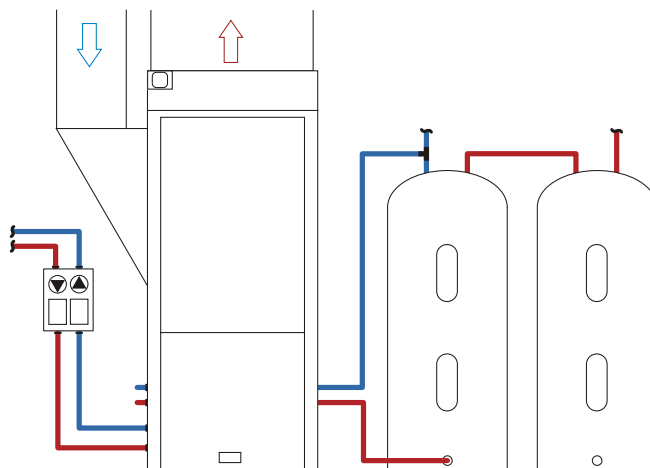
Optional Option 18 Limited Compressor and MCHX extended warranty, years 11 to 18



Other Optional Warranties available

See page 28 for more Warranty details




INSTALLATION EXAMPLE





VS/VT | SINGLE OR 2-STAGE Compact Vertical Packaged Unit

Made to fit in tight spaces.

-  Forced air heating and cooling
-  Domestic hot water assist
-  Optional EPIC connected controls (VT)



UNIT FEATURES

VS – 5 Sizes: 006, 009, 012, 015, 018

VT – 7 Sizes: 024, 030, 036, 042, 048, 060, 072

Seamless Connectivity with EPIC connected controls

- Energy monitoring
- Compatible with most heat pump thermostats and WiFi networks
- Intuitive, future-proofed design

All-Aluminum Micro-Channel Air Coil (MCHX)

Elastomeric compressor isolation mounting suspension

Small foot-print cabinet with removable access panels.

Double O-Ring Water Fittings

High Density Foam Insulated Flat Wound Enhanced Surface Coaxial Heat Exchanger

Front plate-mounted refrigeration service ports give easy access to refrigerant circuit

VS006-015 – LG Rotary Compressor

VS018 – Copeland Single-Stage Scroll Compressor

VT – Copeland 2-Stage Scroll Compressor

VS – Models 006-012 come with Corrosion-proof stainless steel drain pan

VS/VT – Models 018-072 come with Composite, anti-microbial drain pan with condensate overflow protection sensor

Rugged Steel Cabinet with Removable Access Panels

Easy access control box - folds up and out for service

Thermostatic Expansion Valve (TXV) metering for extended range of loop temperatures

Digital Controls with Fault Retry and Service LED's

Optional ECM Blower Motor

VS015-018 – Standard Desuperheater with Internal Pump

VT024-072 – Standard Desuperheater with Internal Pump

Copper or Optional Cupronickel Heat Exchanger

WARRANTY

Standard 10-5 Year Warranty

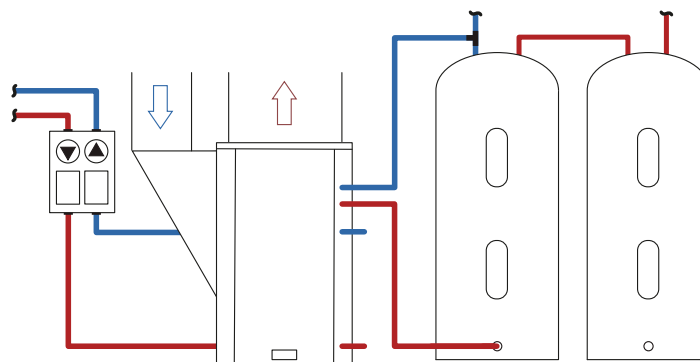
Optional Option 18 Limited Compressor and MCHX extended warranty, years 11 to 18



Other Optional Warranties available

See page 28 for more Warranty details




INSTALLATION EXAMPLE



ZS/ZT | SINGLE OR 2-STAGE Compact Horizontal Packaged Unit

A light unit with high efficiencies.



-  Forced air heating and cooling
-  Domestic hot water assist
-  Optional EPIC connected controls (ZT)



UNIT FEATURES

ZS – 6 Sizes: 006, 009, 012, 015, 017, 018

ZT – 7 Sizes: 024, 030, 036, 042, 048, 060, 072

Seamless Connectivity with EPIC connected controls

- Energy monitoring
- Compatible with most heat pump thermostats and WiFi networks
- Intuitive, future-proofed design

Field convertible side or end discharge

UL GREENGUARD certified foam insulation

Optional 1" or 2" filter rack available

Standard Copper Coaxial Heat Exchanger

Cupronickel Coaxial Heat Exchanger

All-Aluminum Micro-Channel Air Coil (MCHX)

ZS – Optional PSC or ECM Blow Motor

ZT – ECM Blow Motor

Optional Factory Installed soft start kit

Corrosion-proof stainless steel drain pan

ZS006-015 – LG Rotary Compressor

ZS017-018 – Copeland Single-Stage Scroll Compressor

ZT – Copeland 2-Stage Scroll Compressor

ZS015-018 – Standard Hot Water Generator (HWG) with Internal Pump

ZT – Standard Hot Water Generator (HWG) with Internal Pump

ZS – 3/4" FPT Water Fittings (006-017), 1" FPT Water Fittings (018)

ZT – 1" FPT

WARRANTY

Standard 10-5 Year Warranty

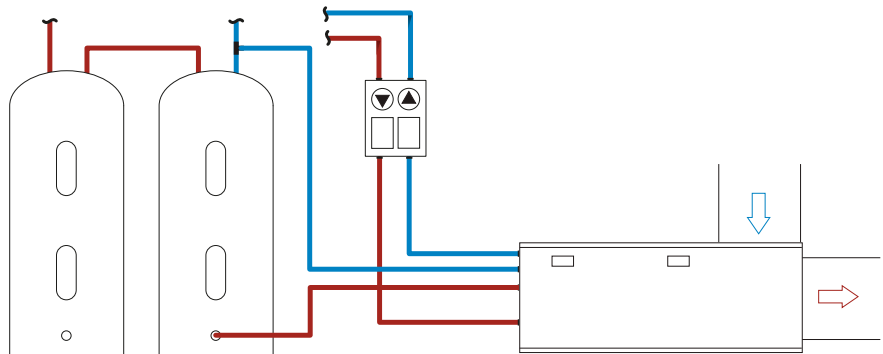
Optional Option 18 Limited Compressor and MCHX extended warranty, years 11 to 18



Other Optional Warranties available

See page 28 for more Warranty details




INSTALLATION EXAMPLE





BS/BT | SINGLE OR 2-STAGE Indoor Split Unit

Made to standalone or as part of a dual-fuel system.

-  Forced air heating and cooling
-  Domestic hot water assist
-  Optional EPIC connected controls



UNIT FEATURES

BS – 1 Size: 018

BT – 5 Sizes: 024, 036, 048, 060, 072

Matched multi-position air handler or A-coil

Digital controls with fault retry, service fault LED's and remote fault indication

BS018 – Copeland Single Speed Scroll Compressor

BT – Copeland 2-Stage Scroll Compressor

Seamless Connectivity with EPIC connected controls

- Energy monitoring
- Compatible with most heat pump thermostats and WiFi networks
- Intuitive, future-proofed design

Standard Desuperheater with Internal Pump

Copper or Optional Cupronickel Heat Exchanger

Double O-Ring Water Fittings

WARRANTY

Standard 10-5 Year Warranty

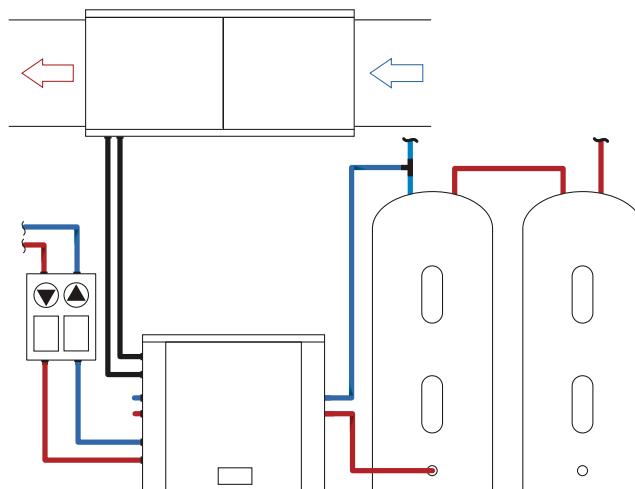
Optional Option 18 Limited Compressor extended warranty, years 11 to 18



Other Optional Warranties available

See page 28 for more Warranty details

INSTALLATION EXAMPLE







**COMING
SOON**

Register for the
webinar on
March 20



WV | VARIABLE SPEED Water-to-Water Unit

One system that does it all!

-  Radiant in-floor heat
-  Forced air heating and cooling
-  Up to 100% of domestic hot water needs
-  EPIC connected controls



UNIT FEATURES

- 1 Size: 060
- Copeland Variable Speed Compressor
- Double O-Ring Connections (comes with fittings)
- Variable Speed Capacity Modulation
- High Temperature Output to 135°F Leaving Load Temp
- 100% Domestic Water Heating Capability
- On-board Controls for Outdoor Temperature Reset

- Built-In LCD Display
- Brazed Plate Heat Exchanger Technology
- Variable Speed Internal Load and External Source Pumps
- Electric & Boiler Backup Option
- Multiple Indirect Hot Water Heater Options: 50 Gallon, 80 Gallon, 120 Gallon
- Pressurized and non-pressurized source pumping options: Single pump and dual pumps

Dual fuel operation in tandem with modulating boilers

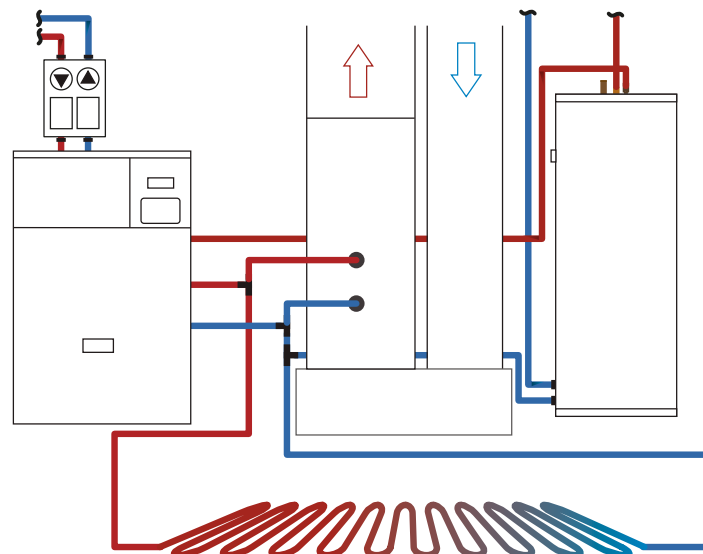
Seamless Connectivity with EPIC connected controls

- Energy monitoring
- Compatible with most heat pump thermostats and WiFi networks
- Make settings changes remotely

WARRANTY

- Standard 10-5 Year Warranty
 - Tank excluded and manufacturer's warranty applies
- Other Optional Warranties available
- See page 28 for more Warranty details





INSTALLATION EXAMPLE



WT | 2-STAGE Water-to-Water Unit

A great system for radiant in-floor heating needs.



-  Radiant in-floor heating
-  Domestic hot water assist
-  Pool heating
-  Forced air heating and cooling



UNIT FEATURES

3 Sizes: 036, 048, 060

Advanced Elastomeric compressor isolation mounting suspension

Digital controls with fault retry, service fault LED's and remote fault indication

Standard Copper or optional Cupronickel heat exchanger [source side] / Copper [load side]

High efficiency Copeland scroll compressor

Rugged steel cabinet

Optional Hot Water Generator

Double O-ring connections (source side)

1" FPT connections (load side)

WARRANTY

Standard 10-5 Year Warranty

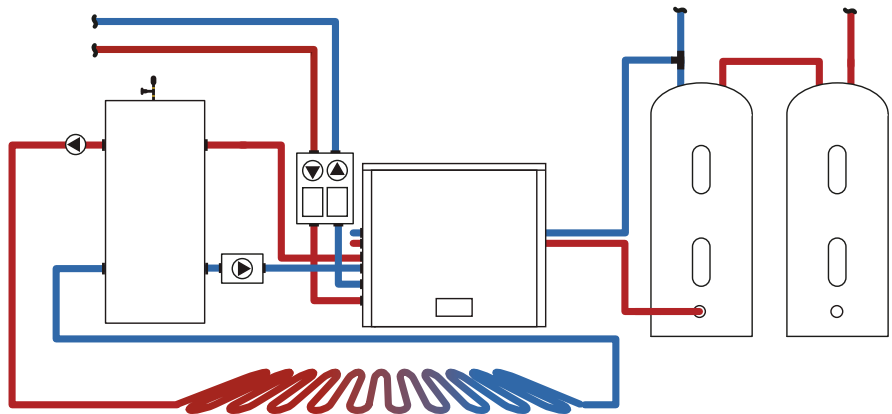
Optional Option 18 Limited Compressor extended warranty, years 11 to 18



Other Optional Warranties available

See page 28 for more Warranty details





INSTALLATION EXAMPLE





WS | SINGLE-STAGE AND DUAL COMPRESSOR Water-to-Water Unit

A lighter and more efficient water-to-water heat pump.

-  Radiant in-floor heating
-  Domestic hot water assist
-  Pool heating
-  Forced air heating and cooling



UNIT FEATURES

5 Sizes: 036, 048, 060, 072, 084

Copeland Single Stage Scroll Compressors

1-1/4" load side connections

1-1/4" source side connections (brazed plate for closed loop applications) or secondary heat exchanger available for open loop systems

Front, Top & Rear Access

Electronic Controls with Safety Lock Out

High and Low Access Valves Ports

Thermostatic Expansion Valve (TXV) for 3-5 ton, Electronic Expansion Valve (EXV) for 6-7 ton.

Stainless Brazed Plate Heat Exchangers (BPHE)

Standard Desuperheater with Internal Pump

Internal Flow Switch

Optional factory installed soft-start available.

WARRANTY

Standard 10-5 Year Warranty

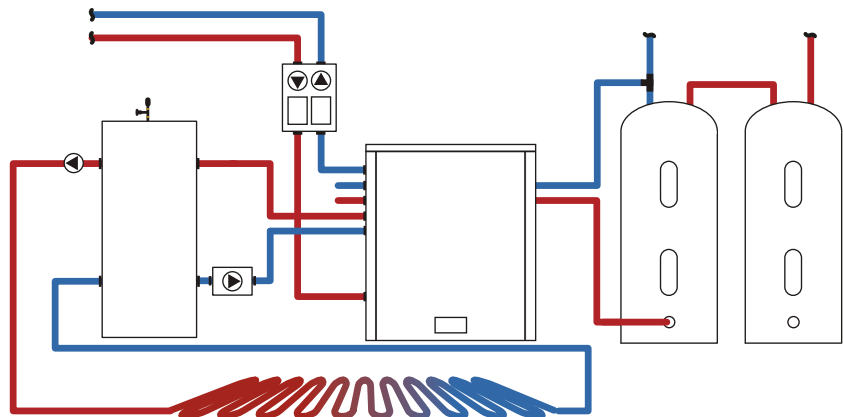
Optional Option 18 Limited Compressor extended warranty, years 11 to 18



Other Optional Warranties available

See page 28 for more Warranty details

INSTALLATION EXAMPLE





ADVANTAGE | VARIABLE SPEED Air-to-Water Unit

A turnkey all in one solution.



- Forced air heating and cooling
- Radiant in-floor comfort
- Up to 100% of domestic hot water needs
- EPIC connected controls

UNIT FEATURES

EAV – 2 Sizes: 030, 060

Monobloc design – compact, pre-assembled system with zero refrigerant lines outside of the system.

Outdoor Unit (AV)

Variable-Speed Internal Circulating Pump

ECM Fan

Refrigerant Heated Condensate Pan

Inverter-Driven Technology and Vapor Injection, Variable-Speed Compressor

Temperature Sensors and Pressure Transducers

Indoor Unit (EM)

Large LCD Control Screen

Electric Backup and Auxiliary Heat

Internal Bypass Valve

Pre-Installed Internal Expansion Tank

Included Internal Flush Blocks

Vortex Flow Sensor

Dual fuel operation in tandem with modulating boilers

Seamless Connectivity with EPIC connected controls

- Energy monitoring
- Compatible with most heat pump thermostats and WiFi networks
- Intuitive, future-proofed design

Multiple Indirect Hot Water Heater Options: 50 Gallon, 80 Gallon, 120 Gallon

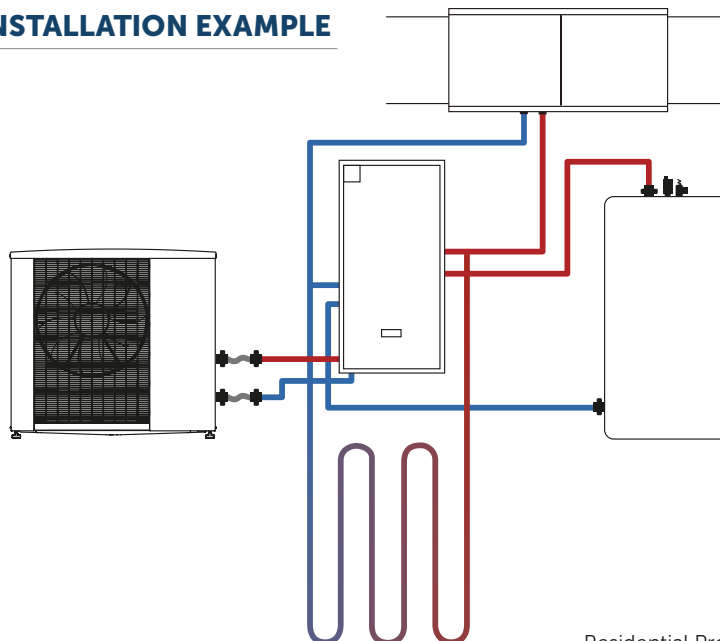
WARRANTY

The standard warranty includes three years for all parts with seven years for the compressor, and a 90 day out-of-the-box assurance.



See page 28 for more Warranty details

INSTALLATION EXAMPLE



HYDRONIC SERIES Multi-Position Air Handler



UNIT FEATURES

- 4 sizes: 2 (024), 3 (036), 4 (048), and 5 (060) ton
- Multi-Positional Applications (upflow, downflow, horizontal)
- Variable Speed ECM Fan Motor
- Factory installed 75VA Transformer with Circuit Breaker
- Single-point Electrical Connection for Auxiliary Heat
- "Easy glide" slide out "A" Coil assembly for downflow applications
- Easy to remove access panels
- Easy to remove thermostat and control board "Snap Lock" mount
- Galvanized, pre-painted steel for quality and durability
- Corrosion proof plastic drain pan with primary and secondary connections
- "Easy glide" slide out blower assembly
- Closed cell insulated cabinet

- 2 piece cabinet - cased coil and blower
- Modular Design allows flexibility when installing in tight spaces, which removes the need for home or building structure modifications
- Optional "Plug-N-Play" Field Installed Electric Heater
- Optional Filter Rack
- Single coil for both chilled water and hot water
- Designed for 100°F to 120°F water in heating operation & 42°F to 50°F water in cooling operation
- Optimized for use with Enertech geothermal branded water-to-water and air-to-water heat pumps
- Copper sweat water connections
- 3 Year Parts Only Warranty and 90 Day Out-of-Box Assurance
- Consult price book for additional warranty coverage details

HYDRONIC SERIES Cased "A" Coil



UNIT FEATURES

- 4 sizes: 2 (024), 3 (036), 4 (048), and 5 (060) ton
- Multi-Positional Applications
- Galvanized, pre-painted steel for quality and durability
- Corrosion proof plastic drain pan with primary and secondary connections
- "Easy glide" slide out coil assembly
- Closed cell insulated cabinet
- Designed for 100°F to 120°F water in heating operation & 42°F to 50°F water in cooling operation

- Single coil for both chilled water and hot water
- Optimized for use with Enertech geothermal brand water-to-water and air-to-water heat pumps
- Corrosion-proof plastic drain pan with primary and secondary drain connections
- Copper sweat water connections
- 3 Year Parts Only Warranty and 90 Day Out-of-Box Assurance
- Consult price book for additional warranty coverage details

ENERTECH DX SERIES

R-454B, Multi-Position Air Handlers



UNIT FEATURES

AHRI match with Enertech Split Systems

6 sizes: 1.5 (018), 2 (024), 3 (036), 4 (048), 5 (060), and 6 (072) ton

Multi-Positional Applications (upflow, downflow, horizontal)

Variable Speed ECM Fan Motor

Factory Installed TXV (for cooling)

Factory installed 75VA Transformer with Circuit Breaker

Single-point Electrical Connection for Auxiliary Heat

All-Aluminum Micro-channel Air Coil

Modular Design allows flexibility when installing in tight spaces, which removes the need for home or building structure modifications

"Easy glide" slide out "A" Coil assembly for downflow applications

Easy to remove access panels

Easy to remove thermostat and control board "Snap Lock" mount

Galvanized, pre-painted steel for quality and durability

Corrosion proof plastic drain pan with primary and secondary connections

"Easy glide" slide out blower assembly

Closed cell insulated cabinet

2 piece cabinet - cased coil and blower

Optional "Plug-N-Play" Field Installed Electric Heater

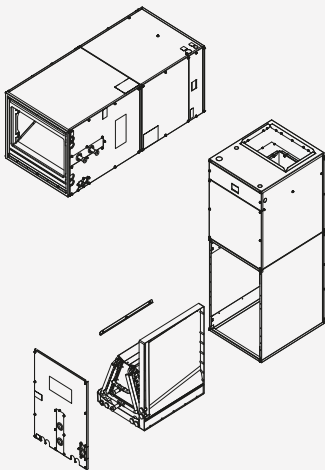
Optional Filter Rack

5 Year Parts and 5 Year Service Labor Allowance warranty

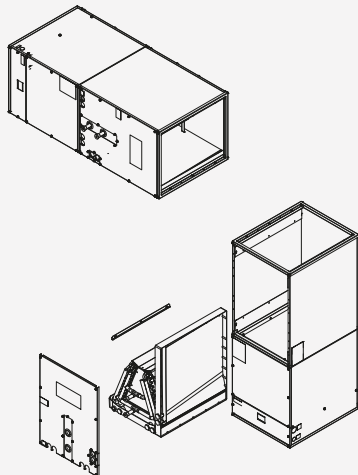
Optional extended warranty options available

HYDRONIC ASSEMBLY CONFIGURATIONS

Upflow

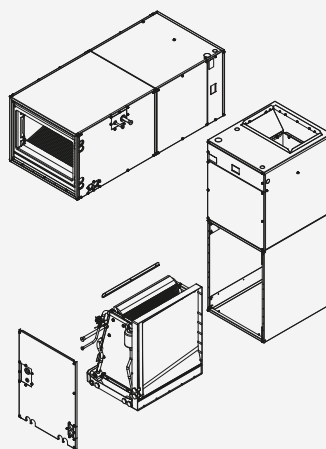


Downflow

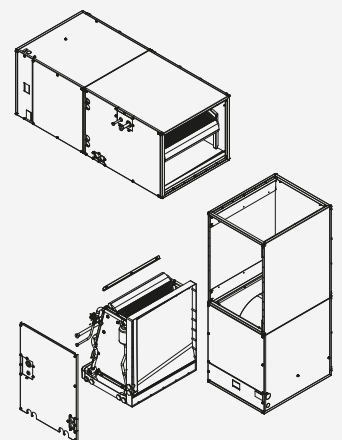


DX ASSEMBLY CONFIGURATIONS

Upflow



Downflow



FLOW CENTERS, INSULATED PUMPS & REPLACEMENT PUMPS

Pressurized Pumping

- 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



HOSE KITS & LOOP ADD-ONS

- GeoPrime reservoir tanks
- Geo Booster
- Pressure batteries



THERMOSTATS



Sensi Touch Wi-Fi

- HD color touchscreen
- Can change temperature setting based on GPS location
- Smart home compatible
- Easy-click, no screwdriver terminals
- 4 Heat / 2 Cool stages



Sensi Wi-Fi

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



Touch Screen

- Single-stage / multi-stage
- Programmable (7-day, 5/1/1 day) or non-programmable
- Remote sensing indoor or outdoor and at the thermostat
- Programmable fan with comfort circulator fan option



Non-Programmable

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

LOOP PIPE



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

FITTINGS



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

MRPEX RADIANT TUBING

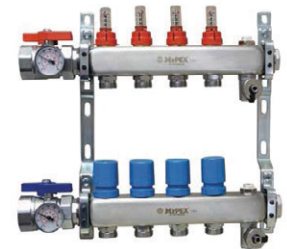
PEX-a Tubing with Oxygen Barrier

- Cross-Linked Polyethylene
- Noise reduction barrier on sizes up to 3/4"
- Bending Radius of 4 times O.D.
- 30 Year



Manifolds

- Stainless Steel
- 2-12 Loops
- 1 1/4" and 1 1/2" options
- Comes pre-mounted on brackets
- Manual Air vents and fill drain valves
- Includes full port ball valves with thermometers



Fittings

- Connect PEX tubing to manifolds
- Transition fittings for EK connection
- Consist of nut, insert, and nickel plated brass compression ring



Actuators

- 4-wire w/ End Switch
- 2-Wire
- 4-wire auto balancing option



Other Items



Thermostats



Expansion Tools



Tubing Uncoiler



Bend Supports



Aluminum Plates

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



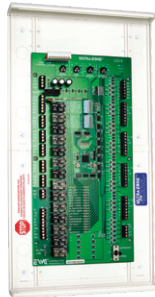
SBD [Smart-Bypass-Damper]

- No Measuring instruments or weights
- Self balancing in all operation modes
- LED indicators for setup response
- Single push button setup



UZC : 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

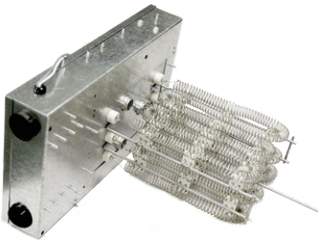
- Computer watchdog circuit
- Auto-changeover from any zone
- LED display for complete system read out
- Supply air sensor to protect equipment
- Adjustable purge time



AUXILIARY HEATERS

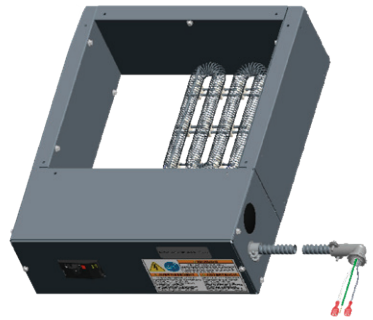
Internal Auxiliary Electric Heater

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



Close Coupled Duct Heater Features:

- Single piece design (no separately mounted control box)
- Heater staging (VS/VT & ZS/ZT Series)
- Low voltage harness for direct connection to relay board
- Internal circuit breakers
- Automatic high limit and auxiliary limit switches for over temperature protection
- Downstream installation not required like external duct heater.
- Easy installation

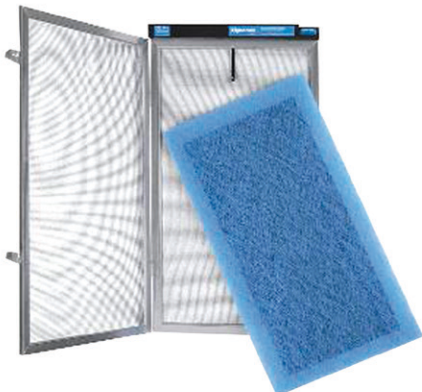


FILTERS

Electronic Dynamic® Filter

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

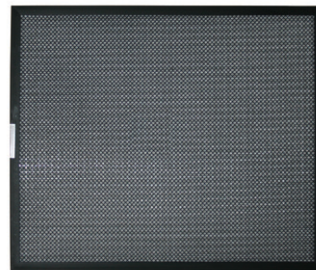
Sizes: 16"x 20"x 1" up to 28"x 34"x 1"
 (see price book for actual sizes and compatibility)



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

VS – Single-Stage Compact Vertical Packaged – Water-to-Air (PLEASE NOTE PSC AND ECM BLOWER LISTINGS)

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		
VS006	Ground Water	7,600	25.9	6,500	4.4	-	-	-	-	30"	21.5"	21.5"	-	167
	Ground Loop	7,000	18.6	4,900	3.4	-	-	-	-					
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	-	-	-	-	17,400	31.6	14,400	5.4	37.3"	22.5"	22.5"	-	234
	Ground Loop	-	-	-	-	16,000	22.3	11,500	4.3					
VS018	Ground Water	-	-	-	-	23,200	30.5	19,600	5.3	37.3"	22.5"	22.5"	-	260
	Ground Loop	-	-	-	-	21,700	22.2	15,400	4.0					

VT – Two-Stage Compact Vertical Packaged – Water-to-Air

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		
VT024	Ground Water	27,600	23.8	19,900	28.4	23,900	4.6	16,800	4.4	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					
VT030	Ground Water	34,100	23.1	26,500	30.4	30,300	4.6	22,100	4.7	37.3"	22.5"	22.5"	-	265
	Ground Loop	32,200	18.4	25,500	25.8	24,300	3.8	20,000	4.2					
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					
VT042	Ground Water	49,200	24	36,500	31.4	40,100	4.6	28,800	4.7	41.0"	22.5"	27.9"	-	357
	Ground Loop	45,900	18.5	35,100	26	32,400	3.9	25,500	4.2					
VT048	Ground Water	53,600	24.5	39,100	32.6	48,500	4.9	34,800	5.3	41.0"	25.0"	27.9"	-	361
	Ground Loop	50,300	18.8	37,400	26.6	38,500	4.0	30,800	4.6					
VT060	Ground Water	65,800	21.7	48,300	28.1	61,300	4.6	43,500	4.8	41.0"	25.0"	27.9"	-	373
	Ground Loop	61,800	17.2	46,600	23.6	48,500	3.8	38,600	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					

YT – Vertical Packaged – Water-to-Air

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		
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	15,200	4.8					
YT036	Ground Water	42,300	27.9	31,400	35.1	35,500	5.4	25,800	5.5	54.0"	25.4"	30.5"	61.25"	405
	Ground Loop	39,700	21.0	30,400	29.5	27,900	4.3	23,000	4.9					
YT048	Ground Water	55,200	24.9	40,700	32.6	46,500	5.0	32,700	5.3	54.0"	25.4"	30.5"	61.25"	450
	Ground Loop	51,900	19.2	39,100	26.6	36,700	4.1	29,000	4.6					
YT060	Ground Water	66,900	23.8	49,400	31.9	60,700	4.8	42,800	5.1	58.4"	25.4"	30.5"	65.65"	475
	Ground Loop	63,100	18.7	47,700	26.4	49,100	4.0	38,300	4.5					
YT072	Ground Water	75,400	21.7	57,800	28.0	70,400	4.5	51,800	4.9	58.4"	25.4"	30.5"	65.65"	480
	Ground Loop	70,300	17.1	55,900	23.9	57,800	3.8	46,600	4.4					

BS – Single-Stage Indoor Split – Water-to-Air

Model	Type	Cooling BTU				Heating BTU				Dimensional Data			Ref. Conn.		Unit Weight (lbs)
		Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth	Liq.	Suct.	
BS018	Ground Water	23,700	29.8	-	-	18,500	5.0	-	-	21"	26"	26"	3/8"	5/8"	190
	Ground Loop	21,800	21.1	-	-	14,400	3.9	-	-						

BT – Two-Stage Indoor Split – Water-to-Air

Model	Type	Cooling BTU				Heating BTU				Dimensional Data			Ref. Conn.		Unit Weight (lbs)
		Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth	Liq.	Suct.	
BT024	Ground Water	27,800	24.5	22,300	33.3	23,900	4.7	17,900	4.7	21"	26"	26"	3/8"	5/8"	190
	Ground Loop	26,300	19.5	21,500	27.8	18,800	3.9	15,400	4.3						
BT036	Ground Water	39,700	24.8	30,600	35	36,700	4.7	25,800	4.8	21"	26"	26"	3/8"	5/8"	201
	Ground Loop	36,900	19.2	29,300	28.9	27,800	3.8	22,600	4.3						
BT048	Ground Water	51,500	22.5	38,000	29.2	51,300	4.5	35,800	4.8	21"	26"	26"	3/8"	3/4"	226
	Ground Loop	47,800	17.3	36,600	24.3	41,000	3.6	31,100	4.1						
BT060	Ground Water	65,700	22.8	50,000	29.1	58,300	4.3	42,700	4.6	21"	26"	26"	3/8"	7/8"	229
	Ground Loop	61,100	17.6	48,100	24.3	46,800	3.8	38,200	4.2						
BT072	Ground Water	70,700	19.9	57,400	25.1	70,500	4.0	52,900	4.3	21"	26"	26"	3/8"	7/8"	244
	Ground Loop	67,200	15.8	54,900	21.1	57,300	3.4	47,700	3.8						

ZS — Single Stage Compact Horizontal Packaged — Water-to-Air (PLEASE NOTE PSC AND ECM BLOWER LISTINGS)

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		
ZS006	Water Loop	6,000	14.1	7,900	5.4	-	-	-	-	12.0"	20.0"	40.0"	Add 2.4" to width w/ filter rack	140
	Ground Water	6,900	22.9	6,300	4.3	-	-	-	-					
	Ground Loop	6,300	16.6	4,700	3.3	-	-	-	-					
ZS009	Water Loop	8,800	13.6	11,100	4.9	-	-	-	-	12.0"	20.0"	40.0"	Add 2.4" to width w/ filter rack	140
	Ground Water	9,800	20.9	9,000	4.2	-	-	-	-					
	Ground Loop	9,200	15.9	7,300	3.5	-	-	-	-					
ZS012	Water Loop	11,000	12.5	13,600	4.3	-	-	-	-	12.0"	20.0"	40.0"	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 COAX	Water Loop	-	-	-	-	13,500	14.7	17,800	5.7	17.0"	21.0"	40.0"	Add 2.4" to width w/ filter rack	173
	Ground Water	-	-	-	-	15,600	24.9	14,300	4.8					
	Ground Loop	-	-	-	-	14,200	17.6	11,200	3.9					
ZS017 COAX	Water Loop	-	-	-	-	15,900	14.2	19,400	4.9	17.0"	21.0"	40.0"	Add 2.4" to width w/ filter rack	173
	Ground Water	-	-	-	-	18,000	21.9	15,800	4.1					
	Ground Loop	-	-	-	-	16,600	16.3	12,500	3.4					
ZS018 COAX	Water Loop	-	-	-	-	19,100	15.4	21,900	5.5	19.2"	21.7"	52"	Add 2.4" to width w/ filter rack	230
	Ground Water	-	-	-	-	21,400	26	17,500	4.7					
	Ground Loop	-	-	-	-	20,100	18.7	14,100	3.7					

ZT — Two Stage Compact Horizontal Packaged — Water-to-Air

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		
ZT024 COAX	Water Loop	25,300	15.9	18,200	17.4	28,800	5.2	21,000	5.6	19.2"	21.7"	52"	Add 2.4" to width w/filter rack	236
	Ground Water	28,200	23.7	20,800	29.7	22,900	4.6	16,600	4.6					
	Ground Loop	26,400	18.3	20,000	25	18,300	3.9	14,500	4.1					
ZT030 COAX	Water Loop	30,200	15.1	22,000	16.2	34,800	5.1	26,200	5.3	19.2"	21.7"	52"	Add 2.4" to width w/filter rack	245
	Ground Water	32,600	21.6	24,700	26.5	28,800	4.5	21,400	4.5					
	Ground Loop	31,500	17.5	23,900	22.7	23,300	3.7	19,300	4.0					
ZT036 COAX	Water Loop	35,100	15.5	25,700	18	42,300	5.0	31,000	5.7	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	263
	Ground Water	39,400	23.6	29,100	31.8	34,000	4.6	24,400	4.8					
	Ground Loop	36,700	17.9	28,100	26.6	27,100	3.8	22,000	4.3					
ZT042 COAX	Water Loop	41,200	15.5	30,500	16.9	49,500	4.7	35,800	5.2	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	280
	Ground Water	46,000	23.4	34,800	30.5	40,100	4.4	28,900	4.6					
	Ground Loop	43,000	18.0	33,500	25.3	32,900	3.6	26,400	4.1					
ZT048 COAX	Water Loop	46,500	15.1	34,600	16.6	55,300	4.8	40,400	5.5	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	293
	Ground Water	52,200	22.1	39,600	29.4	45,900	4.4	32,800	4.6					
	Ground Loop	48,700	17.3	38,000	24.4	36,900	3.6	29,300	4.1					
ZT060 COAX	Water Loop	55,100	14.6	42,000	16.5	70,700	4.7	50,900	5.4	21.2"	24"	61"	Add 2.4" to width w/filter rack	303
	Ground Water	62,000	21.2	47,300	27.9	58,500	4.2	41,300	4.5					
	Ground Loop	59,000	16.9	45,800	23.7	46,800	3.6	36,400	4.0					
ZT072 COAX	Water Loop	66,600	13.7	50,700	15.2	83,200	4.5	62,700	5.1	21.2"	24"	61"	Add 2.4" to width w/filter rack	312
	Ground Water	73,500	19.2	58,100	24.8	67,500	4.0	49,200	4.2					
	Ground Loop	69,500	15.6	56,000	21.3	55,500	3.4	44,400	3.8					

Notes:

1. Rated in accordance with AHRI/ISO standard 13256-1, which includes pump penalties.
2. 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.
3. GLHP (Ground Loop Heat Pump) entering water temps are 32°F heating/77°F cooling for full load and 41°F heating/68°F cooling for part load. GLHP ratings based upon 15% methanol by weight.
4. GWHP (Ground Water Heat Pump) entering water temps are 50°F heating/59°F cooling for full and part load.
5. WLHP (Water Loop Heat Pump) entering water temps are 68°F heating/86°F cooling for full and part load.
6. Not all units are rated for all standards.
7. Models above 135,000 Btu/hr are outside of the scope of AHRI 13256-1 and the ENERGY STAR program.
9. For water fitting type/diameter, electrical data, extended data, and other product details, consult unit submittal data (commercial) or catalog (residential).

*ZS015, 018, with coax & psc blower motor are not Energy Star qualified models.

UNIT PERFORMANCE DATA

WV — Variable-Speed — Water-to-Water

Model	Type	Cooling BTU				Heating BTU				Dimensional Data			Src. In Src. Out	Load In Load Out	Unit Weight (lbs)
		Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth			
WV060	Ground Loop	41,100	17.6	20,900	21.6	53,900	3.2	29,100	3.8	41.9"	25"	28.5"	1"	1"	355

WT — Two-Stage — Water-to-Water

Model	Type	Cooling BTU				Heating BTU				Dimensional Data			Src. In Src. Out	Load In Load Out	Unit Weight (lbs)
		Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth			
WT036	Ground Water	42,200	20.4	30,900	23.7	48,000	4.1	32,500	3.8	23"	26"	32"	1 1/4"	1 1/4"	334
	Ground Loop	40,200	15.4	30,200	19.8	38,100	3.3	27,700	3.2						
WT048	Ground Water	52,700	21.2	38,500	24.4	61,100	4.2	42,600	4.0	23"	23"	39"	1 1/4"	1 1/4"	430
	Ground Loop	49,500	16.3	37,500	20.6	49,000	3.5	37,600	3.5						
WT060	Ground Water	62,700	20.4	47,700	23.6	67,000	3.9	49,300	3.7	23"	23"	39"	1 1/4"	1 1/4"	430
	Ground Loop	60,600	16.2	46,600	20.2	52,900	3.1	43,900	3.3						

WS — Single-Stage — Water-to-Water

Model	Type	Cooling BTU				Heating BTU				Dimensional Data			Src. In Src. Out	Load In Load Out	Unit Weight (lbs)
		Full Load	EER	Part Load	EER	Full Load	COP	Part Load	COP	Height	Width	Depth			
WS036	Ground Loop	34,900	17.7	–	–	31,000	3.3	–	–	23"	26"	32"	1 1/4"	1 1/4"	259
WS048	Ground Loop	50,500	17.3	–	–	45,200	3.2	–	–	23"	26"	32"	1 1/4"	1 1/4"	277
WS060	Ground Loop	63,300	16.9	–	–	53,800	3.2	–	–	23"	26"	32"	1 1/4"	1 1/4"	277
WS072*	Ground Loop	76,600	17.8	–	–	63,200	3.1	–	–	23"	26"	32"	1 1/4"	1 1/4"	327
WS084*	Ground Loop	88,400	16.2	–	–	72,900	3.1	–	–	23"	26"	32"	1 1/4"	1 1/4"	348

Notes:

1. Rated in accordance with ISO Standard 13256-2, which includes pump penalties.
2. GLHP (Ground Loop Heat Pump) entering source temps are 32°F heating/77°F cooling for full load and 41°F heating/68°F cooling for part load. Entering load temps are 104°F heating/53.6F cooling. GLHP ratings based upon 15% methanol by weight.
3. GWHP (Ground Water Heat Pump) entering source temps are 50°F heating/59°F cooling for full and part load. Entering load temps are 104°F heating/53.6F cooling.
4. WLHP (Water Loop Heat Pump) entering water temps are 68°F heating/86°F cooling for full and part load. Entering load temps are 104°F heating/53.6F cooling.
5. Not all units are rated for all standards.
6. Models above 135,000 Btu/hr are outside of the scope of AHRI 13256-2 and the ENERGY STAR program.
7. For water fitting type/diameter, electrical data, extended data, and other product details, consult unit submittal data (commercial) or catalog (residential).

* Based upon R-410A refrigerant data. R-454B refrigerant data to be published soon.

AV — Variable Speen — Air-to-Water

Model	Full Load Heating Capacity (BTUH)	COP at 47°F	COP at 17°F	Full Load Cooling Capacity (BTUH)	IPLV
AV030	36,360	4.40	3.08	21,480	16.0
AV060	62,520	4.24	3.14	38,760	15.6

Heating capacities based upon 105°F LWT. Cooling capacities based on 95°F out air temperature and 44°F LWT. Ratings tested in accordance with AHRI 550/590.

California Energy Commission (CEC) Rating

AV — Variable Speen — Air-to-Water

Model	Cooling Capacity at 95°F (BTUH)	Cooling Capacity Tons at 95°F (BTUH)	EER	IPLV	Heat Capacity at 47°F (BTUH)	COP at 47°F	Heat Capacity at 17°F (BTUH)	COP at 17°F
AV030	21,360	1.78	7.70	16.0	36,960	3.8	28,320	2.8
AV060	38,640	3.22	7.11	15.6	63,996	3.8	48,053	2.8

Heating capacities based on 120°F LWT. Cooling capacities based on 95°F out air temperature and 44°F LWT. Ratings tested in accordance with AHRI 550/590.

DX Series, R-454B, Multi-Position Air Handlers

Model	Size (tons)	Dimensional Data <i>All Dimensions In Inches</i>			Return Air Opening		Line Sets		Unit Weight (lbs)
		Height	Width	Depth	Width	Depth	Liquid	Suction	
EAD018	1.5	47.0	18.0	21.5	20.0	16.5	3/8	5/8	155
EAD024	2	47.0	18.0	21.5	20.0	16.5	3/8	5/8	155
EAD036, EAD048	3, 4	53.6	21.5	21.5	20.0	20.0	3/8	3/8	190
EAD060, EAD072	5, 6	53.6	25.0	21.5	20.0	20.0	3/8	7/8	210

Hydronic Series Multi-Position Air Handlers

Model	Size (tons)	Dimensional Data <i>All Dimensions In Inches</i>			Return Air Opening		Water Connection Size		Unit Weight (lbs)
		Height	Width	Depth	Width	Depth	Liquid	Suction	
EAH024	2	47.0	18.0	21.5	20.0	16.5	3/4" O.D	3/4" O.D	155
EAH036, EAH048	3, 4	53.6	21.5	21.5	20.0	20.0	1-1/8" O.D	1-1/8" O.D	190
EAH060	5	53.6	25.0	21.5	20.0	20.0	1-1/8" O.D	1-1/8" O.D	210

DX Series, R-454B, Cased "A" Coils

Model	Size (tons)	Dimensional Data <i>All Dimensions In Inches</i>			Return Air Opening		Line Sets		Unit Weight (lbs)
		Height	Width	Depth	Width	Depth	Liquid	Suction	
EED018, EED024	1.5 - 2	25.4	18.0	21.5	-	-	3/8	5/8	80
EED036	3	30.4	21.5	21.5	-	-	3/8	3/8	95
EED048	4	30.4	21.5	21.5	-	-	3/8	3/4	95
EED060, EED072	5 - 6	30.4	25.0	21.5	-	-	3/8	7/8	100

Hydronic Series Cased "A" Coils

Model	Size (tons)	Dimensional Data <i>All Dimensions In Inches</i>			Return Air Opening		Water Connection Size		Unit Weight (lbs)
		Height	Width	Depth	Width	Depth	Liquid	Suction	
EEH024	2	25.375	18.0	21.5	-	-	3/4" O.D	3/4" O.D	80
EEH036, EEH048	3, 4	30.375	21.5	21.5	-	-	1-1/8" O.D	1-1/8" O.D	95
EEH060	5	30.375	25.0	21.5	-	-	1-1/8" O.D	1-1/8" O.D	100

As a geothermal installer, you know the importance of selecting the right equipment to get the job done right. However, it doesn't have to be complicated. With GeoAnalyst, you will have access to the most comprehensive residential design and application software on the market making it easy to design, size, and present any job.

SIZE IT RIGHT, EVERY TIME

No other software has as many features as GeoAnalyst. With the full product line already loaded, you'll be able to design and size any job. Plus, our software utilizes pure IGSHPA algorithms, not manufacturer-adjusted loop sizing formulas. That means you're sizing the system right, every time.

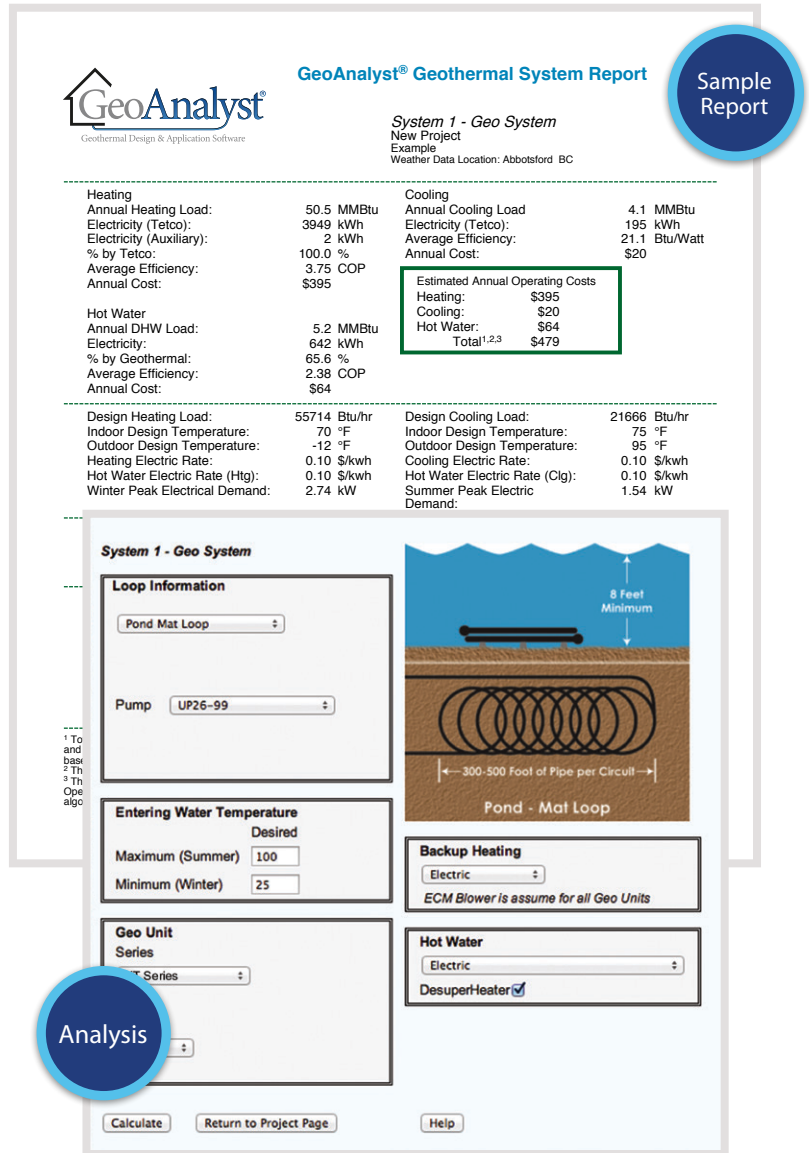
GROUND LOOP SIZING AND OPERATING COST ANALYSIS

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.

ACCESS ONLINE

The web-based GeoAnalyst combines all the great features you've come to expect with the flexibility of accessing the software from a computer or mobile device anywhere, whether in your office, home or on the jobsite!

With GeoAnalyst, you never have to worry about updates. It's up-to-date every time you log in. Whether it's changes to equipment, new features being added, or other exciting updates, it's all done without you having to even think about it. Plus geothermal.net offers unlimited users at no cost.



GeoAnalyst® Geothermal System Report

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

Heating Annual Heating Load: 50.5 MMBtu Electricity (Tetco): 3949 kWh Electricity (Auxiliary): 2 kWh % by Tetco: 100.0 % Average Efficiency: 3.75 COP Annual Cost: \$395		Cooling Annual Cooling Load: 4.1 MMBtu Electricity (Tetco): 195 kWh Average Efficiency: 21.1 Btu/Watt Annual Cost: \$20	
Hot Water Annual DHW Load: 5.2 MMBtu Electricity: 642 kWh % by Geothermal: 65.6 % Average Efficiency: 2.38 COP Annual Cost: \$64		Estimated Annual Operating Costs Heating: \$395 Cooling: \$20 Hot Water: \$64 Total ^{1,2,3} : \$479	
Design Heating Load: 55714 Btu/hr Indoor Design Temperature: 70 °F Outdoor Design Temperature: -12 °F Heating Electric Rate: 0.10 \$/kwh Hot Water Electric Rate (Htg): 0.10 \$/kwh Winter Peak Electrical Demand: 2.74 kW		Design Cooling Load: 21666 Btu/hr Indoor Design Temperature: 75 °F Outdoor Design Temperature: 95 °F Cooling Electric Rate: 0.10 \$/kwh Hot Water Electric Rate (Clg): 0.10 \$/kwh Summer Peak Electric Demand: 1.54 kW	

System 1 - Geo System

Loop Information
 Pond Mat Loop
 Pump: UP26-99

Entering Water Temperature
 Desired
 Maximum (Summer): 100
 Minimum (Winter): 25

Geo Unit
 Series

Backup Heating
 Electric
 ECM Blower is assume for all Geo Units

Hot Water
 Electric
 DesuperHeater

Analysis

Calculate Return to Project Page Help

Visit geothermal.net to try the demo or to register - or call 618-664-9010 to learn more!

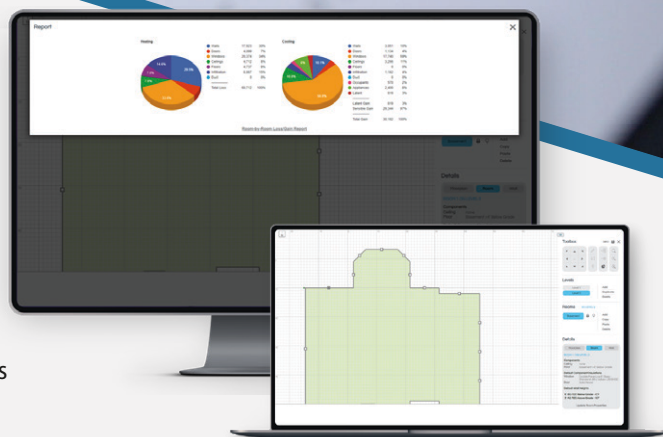


ENERSKETCH^{PRO}

DESIGN ▶ PRICE ▶ SELL

Your Sales Solution

EnerSketch Pro is a design and sales tool that's easy to implement, speeds up the quoting experience, develops standard processes and accurate pricing, provides the customer with a quote in one visit, and increases profits by saving time, quoting efficiently, and closing more jobs.



LOAD ESTIMATOR

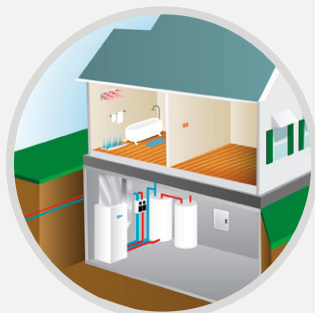
Streamline load estimation and bring your customer along for the ride. The load estimator tool gives you the ability to draw the home in real-time as you take your measurements on site. As you draw, simply select the insulation values and design criteria. EnerSketch Pro will produce accurate heating and cooling load calculations.

PROPOSAL GENERATION

Build a custom proposal for each individual job; No two offers are alike. With EnerSketch Pro, the proposal templates allow for deep customization, allowing you to edit details that match the desired description of work, stock equipment, accessory photos, and terms and conditions. With the ability to add a digital signature, you can leave the site with a signed contract, or give your customer the option to follow up with the signed proposal.

INTEGRATED GEOANALYST SOFTWARE

Let our lightning-fast version of GeoAnalyst do the grunt work to select the geothermal system and display alternatives for comparison. With a new interface, total user inputs are reduced and features a consumer-friendly design. Of course, you still have the option of displaying economic comparisons and bin data if you so choose.



For a free demo of EnerSketch Pro, contact your Territory Manager or visit enertechusa.com/enersketchpro.

Enertech Marketing

Good communication turns ordinary relationships into extraordinary ones. Our goal is to enhance your business by providing monthly newsletters for reminders and updates, video libraries on YouTube, and various email and social media communications. Our support site has everything you need to promote Enertech products through digital channels like social media, your website, and search, in your office, on your vehicles, and more.

SALES SUPPORT

We offer items that supplement and enhance your sales process, and we aim to deliver you leads so you can install more products with less time invested on the consumer education side. Here's how we accomplish this:

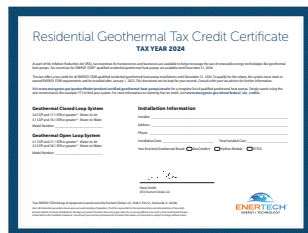
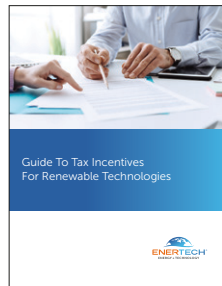
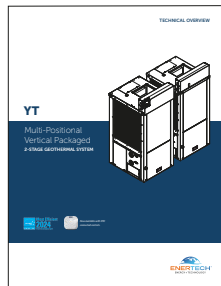
Literature

Product Brochures

Presentation Templates

Guides and Whitepapers

Tax Credit Certificates



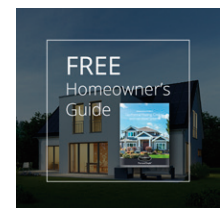
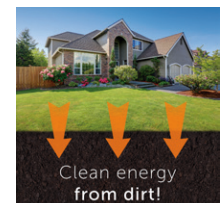
Lead Generation

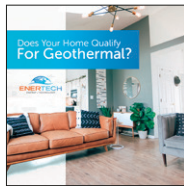
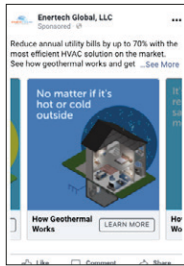
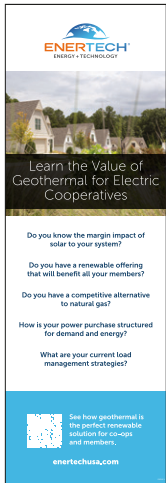
Digital advertising campaigns at the local, state, and national level

Traditional advertising efforts at the local, state, and national level

Home Shows, Agricultural Fairs, and Trade Shows

Dealer website program





ADVERTISING RESOURCES

The advertising resources we offer will set you apart from your competitors. With our branding and messaging along with yours, we've got a full toolkit to help you advertise in your local area. Here's an example of the materials we offer – free of charge:

- Print Ads
- Direct Mail
- Radio Ads
- Outdoor

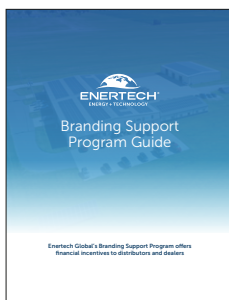
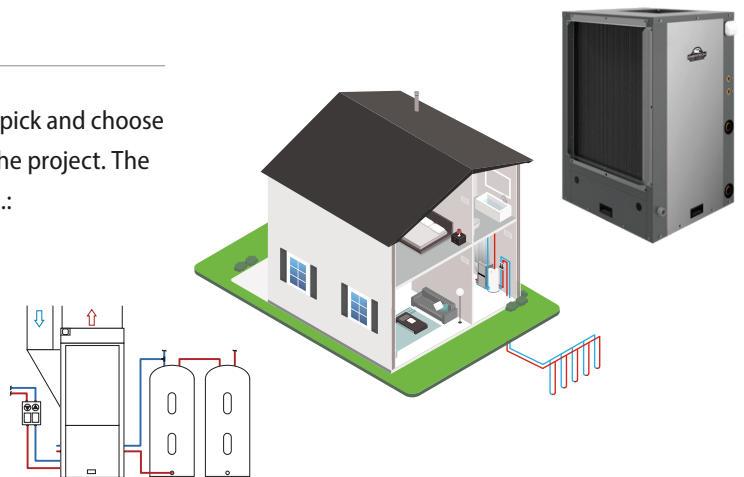
- Digital Ads
- Installation Spotlights
- Apparel
- Event Graphics

GRAPHIC RESOURCES

Got a project that's a bit more unique to your brand? You can pick and choose which of our graphic resources you want to use to complete the project. The following can be used on your website, company vehicles, etc.:

- Product Photography
- Logos

- Icons
- Illustrations



BRANDING SUPPORT

Talk to your Territory Manager about our Branding Support options. We'll help you cover advertising expenses whenever you feature our brand in a way that follows the guidelines.

The Best Geothermal Warranty Options!

The highest quality product should have a warranty that reflects confidence in its design and construction. Enertech strives to embody this principle in the way we stand behind our products. The standard residential warranty includes parts, including Internal plenum and close coupled auxiliary heaters, and labor coverage. 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.

RESIDENTIAL GEOTHERMAL WARRANTY:

10-Year Warranty on All Unit Components*

(where applicable):

- Cabinet
- Compressor
- Water-to-refrigerant heat exchanger

- Air-to-refrigerant heat exchanger (not applicable on hydronic units)
- All internal refrigerant circuit parts
- All internal water circuit parts
- All internal controls/electrical parts
- Internal Electric Auxiliary Heaters

5-Year Labor Allowance** on the Following Items:

- All standard unit components
- Internal plenum and closed coupled auxiliary heaters

Additional geothermal Warranty Options

Option 18 Warranty:

Enertech offers the best geothermal warranty – pure and simple. To make Enertech's warranty offerings even better than its best, we offer the Option 18 Warranty, which covers a one-time



replacement for both the compressor or all-aluminum microchannel air coil (if applicable) to the original homeowners up to 18 years. This coverage ends 18 years from the installation date.

Warranty Reductions

We offer a range of warranty options

to better serve our contractors and consumers.

- 5 Year Parts & Labor Allowance
- 10 Year Parts Only

Warranty options may vary depending on product. Consult with our Customer Service team for pricing and complete warranty details.

* EAD/EED Air Handlers & Coils: 5 Year all unit parts, 5 Year select accessories
EAH/EEH Air Handlers & Coils: 3 Year Parts Only Warranty and 90 Day Out-of-Box Assurance
EAV Air to Water: 3 Year Parts, 7 Year Compressor

** Optional 5-year labor buyup, for years 6-10, available

RESIDENTIAL AIR-TO-WATER WARRANTY:

Our warranty is here to assist if the need arises. The standard warranty includes three years for all parts with seven years for the compressor, and a 90 day out-of-the-box assurance. Discuss warranty options with the

installer for a full explanation of coverage, please register the system, and confirm coverage online using the serial number within 60 days of installation.





Enertech University curriculum is developed from our 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.

Enertech 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.

As further commitment to providing contractors with more tools to grow their business, Enertech University also offers solar PV training, supported by the solar brands we distribute. These trainings include design, sales, and installation of systems.

All training sessions are geared towards technicians, designers, or sales personnel specific to the HVAC and the solar industry. Training will be coordinated through Enertech's corporate office and our distributing partners.

AVAILABLE COURSES INCLUDE:

- Product Installation
- Fusion Training
- Basic Geothermal Troubleshooting
- Advanced Geothermal Troubleshooting
- Ground Loop & Flow Center Application & Installation
- Geothermal Hydronic Systems
- Variable Speed Hydronic Systems
- Design, Sizing & Software
- Sales & Marketing
- Product Introduction/Update
- IGSHPA/NATE Certified Installer Workshop
- Solar PV Design, Sales, and Installation
- Air-to-Water Video Training Modules

Training Provider



Our Guarantee



We guarantee 100% student satisfaction for every course led by an Enertech trainer.

Online Resources



Enertech University has a growing library of videos and workbooks that can be found online. They're great for geothermal installers who are eager to stay ahead of the curve!



Installation Spotlights

EcoSmart x Whisper Valley: A Planned Community for a More Complete Lifestyle

PROJECT DETAILS

Building Size:	1,000 -3,00 sq. ft. (varies by home)	CONSTRUCTION TYPE	New Construction
Geothermal Equipment:	Compact Vertical Packaged VT Compact Horizontal Packaged ZT	INSTALLATION TYPE	Forced Air System
Contractor / Installer:	EcoSmart Solution / Air Temp Solutions	GEOHERMAL LOOP TYPE	Community Loop
Savings:	\$1250+ per year in utility savings, depending on personal energy behaviors		

GEOHERMAL INSTALLATION SPOTLIGHT

Austin, TX

EcoSmart x Whisper Valley: A Planned Community for a More Complete Lifestyle

Whisper Valley, developed in partnership with EcoSmart Solution, is a master plan community that offers an affordable, higher quality living environment. With 2,000+ acres of residential neighborhoods equipped with renewable technologies like geothermal heat pumps and solar PV systems, Whisper Valley "gives the green of Man and Nature the no other place." Each home brings zero-energy capable living at an affordable price. With neighborhood amenities like community gardens, a state-of-the-art fitness facility, and a 600-acre park, Whisper Valley is a place for all ages and lifestyles - a place to put down roots.

EcoSmart is a green energy services provider focused on designing and delivering cutting-edge geothermal infrastructure, combined with a comprehensive suite of distributed energy resources and other renewable technologies.

INSTALLATION DETAILS

Zero-energy capable homes are the future of the housing industry. EcoSmart Solution innovations enhance Whisper Valley homes using a district-wide Geogrid™, solar photovoltaic (PV) systems, energy storage, high-efficiency kitchen appliances, smart home energy management, and home automation technologies like NEST. EcoSmart homes are all 3rd party certified, and are achieving unequalled energy ratings. The result is that Homeowners can make a difference for the environment and lower their monthly energy bills to be next to nothing.

ENERTECH
ENERGY + TECHNOLOGY

PROJECT DETAILS

Building Size:	1,000 -3,00 sq. ft. (varies by home)	CONSTRUCTION TYPE	New Construction
Geothermal Equipment:	Compact Vertical Packaged VT Compact Horizontal Packaged ZT	APPLICATION TYPE	Forced Air System
Contractor / Installer:	EcoSmart Solution / Air Temp Solutions	GEOHERMAL LOOP TYPE	Community Loop
Savings:	\$1250+ per year in utility savings, depending on personal energy behaviors		

We feature our dealers' installations on our website as Installation Spotlights. This provides free advertising for dealers, and it's collateral to use in the sales process.

Geothermal 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.

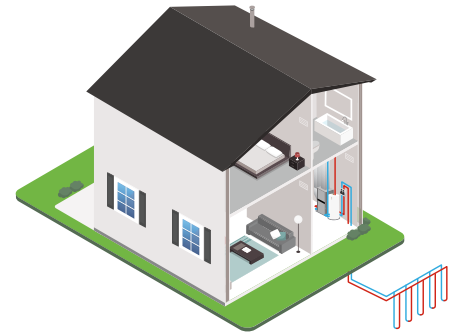
Vertical loops are used mainly when land area is limited in retrofit applications of existing homes. A drilling rig is used to bore holes at of depth of 150 to 300 feet per ton. A U-shaped coil of high density pipe is inserted into the bore hole. The holes are then backfilled with a sealing solution.

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.

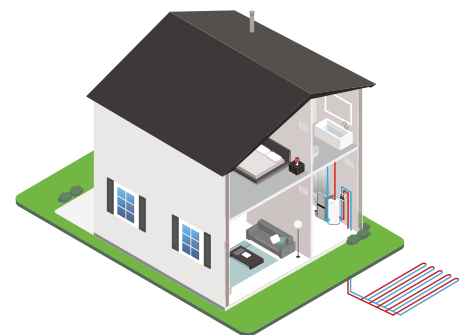
Pond loops are an option if a large body of water is available within approximately 200 feet of the home. A ½ acre, 10 to 12 foot deep body of water is usually adequate to support the average home. The system uses coils of pipe typically 300 to 500 feet in length. The coils are placed in and anchored 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



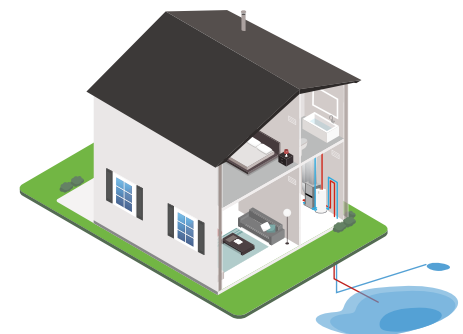
HORIZONTAL LOOP



POND LOOP



OPEN LOOP





enertechusa.com

COMMERCIAL SERIES

ASK ABOUT OUR COMMERCIAL SERIES

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



Every EnerTech geothermal heat pump is handcrafted with pride by our dedicated employees in Mitchell, SD and Greenville, IL.

Enertech Global is continually working to improve its products. As a result, the design, specifications, and general information of each product may change without notice and may not be as described herein. For the most up-to-date information, please visit our website, or contact our Customer Relations department at customerrelations@enertechusa.com. Statements and other information contained herein are not express warranties and do not form the basis of any bargain between the parties, but are merely EnerTech Global's opinion or commendation of its products.