

# *TruClimate 500*

*Water-Cooled Chiller*

Large Commercial | 20 - 80 Ton



*Water-Furnace*  
TruClimate 500

Formerly known as WC Modular Scroll Chiller

*Water-Furnace*  
Commercial Solutions

## MODULAR

### REDUNDANT DESIGN

*Power backups on each module offer freedom.*

N+1 modularity provides true independent function and fully redundant operation for buildings with critical loads. Each module can be individually isolated from other modules in the building for servicing without interrupting operation to other modules in the bank.

### REMOVEABLE HEADER RACKS

*Patented header racks can ship ahead of the chiller to maintain project timelines for multi-phase projects and mechanical room layout optimization.*

Piping racks can be installed and flushed before installing the refrigerant module, and additional header racks can be installed for future central plant expansion.

- Unit can be pulled from pipe rack without shutting down the chiller bank.
- 4-pipe header racks can be combined with 6-pipe dedicated header racks to isolate a glycol loop and achieve heat recovery efficiencies. Each header rack is designed for specific system applications and compatible with every module size.



*Patented header racks can ship ahead*

## SERVICEABILITY

### ADVANCED AUTOMATED CONTROLS PLATFORM

- Simple operating system for the end user, prevents nuisance alarms
- Full communication between components with remote accessibility.
- Monitor refrigerant, energy and performance all through the HMI or through DDC protocols.

### SERVICE MADE SIMPLE

*Completely remove chillers without interrupting operation to the chiller bank.*

Access all components from any side of the chiller. With zero-side clearance design, all refrigeration-side maintenance can be performed from the front, and water-side maintenance can be performed from the rear access panels.

If needed, individual units can be pulled from the chiller bank for service or replacement—all without interrupting the operation of adjacent units or conditioning to the building.



*Easy access panels for servicing*



## APPLICATIONS



### 6-pipe Dedicated flexibility

A 6-pipe dedicated application offers the ability to isolate a low temperature loop while still achieving simultaneous efficiencies. WaterFurnace utilizes this configuration to isolate low temperature loops in hospitals and then recover the heat for hydronic reheat before dumping excess BTUs into a source loop.

- Isolates one of the loops with a different fluid concentration than the other two
- Allows main chiller plant to operate at optimal conditions



### 4-pipe Reversing unique advantages

This solution helps balance ground loop usage by recovering loops that have never had heat extracted. Utilized in geothermal two pipe change-over systems with a ground loop, this header rack configuration is the perfect solution for single-source heating and cooling.

- Can enable waterside economizer utilization year round when coupled with our Versatec WSHP.
- Great for chiller-only retrofits, offering high efficiencies in cooling.
- Can be unitized in swing seasons for heating source without resizing coils because the boilers will still function adequately.

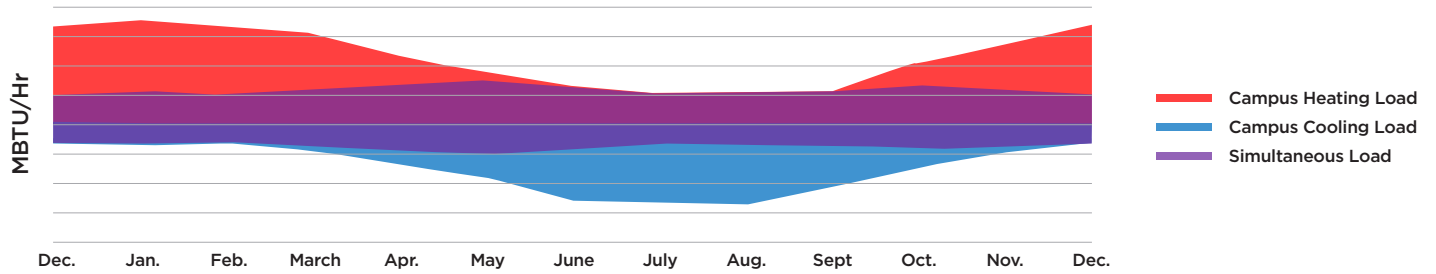


### 6-pipe standard hybrid flexibility

This application is all about maximizing efficiencies as a single-plant cooling and heating system. Typically used with a ground loop, flexible boiler and fluid cooler hybrid systems, the 6-pipe standard hybrid simplifies mechanical and controls efforts.

- Reduces size of ground loop.
- Can be utilized on cooling or heating dominant applications.
- Unit can maintain two set points with a single piece of equipment.

**SIMULTANEOUS HEATING AND COOLING**



**Simultaneous Htg & Clg Applications**

The WaterFurnace patented 6-pipe header rack can provide diverse heating and cooling loads in a single unit. This is unique to the WaterFurnace solution since the rest of the market will be limited to the secondary load, which can cause peak capacity and redundancy issues. Capturing the simultaneous heating and cooling load is where this equipment exceeds 8 COP.

**Cooling Applications**

The modular chiller is typically a great fit for cooling only applications due to its compact size and capacity flexibility. These chillers can get through standard doorways and freight elevators to replace larger chillers.

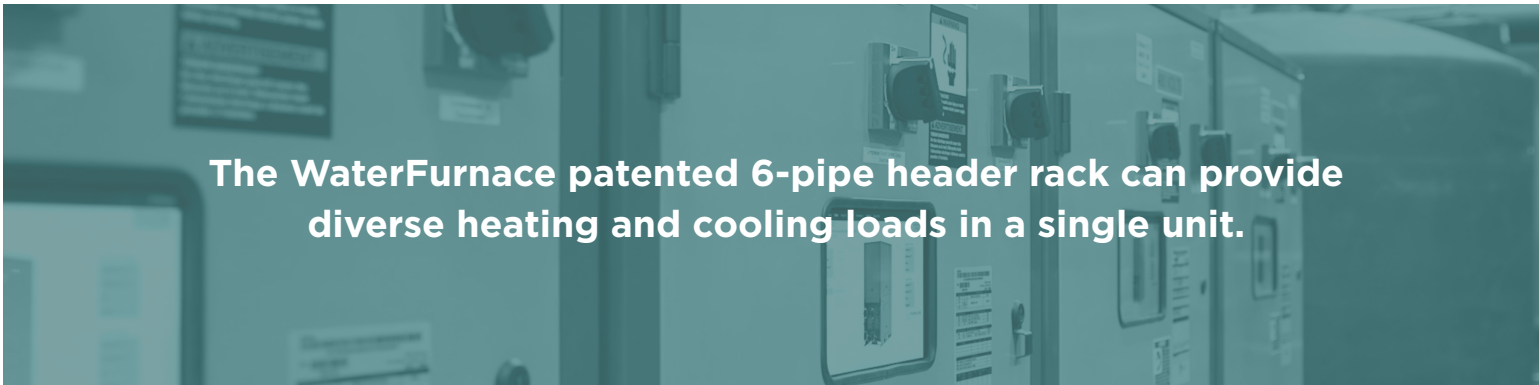
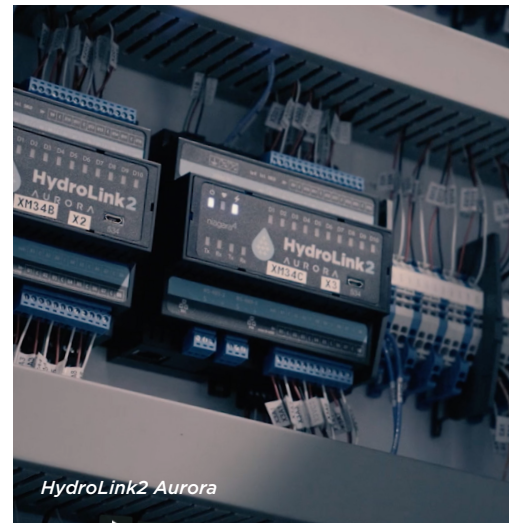
**Heating Applications**

When evaluating heating only applications, the modular chiller can exceed 3.5 COP. When comparing to conventional boiler systems that have a maximum COP of 1, water source heating is a very efficient solution.



**Supervisory Control Panel**

The Hydrolink2 Supervisory Control Panel offers remote accessibility that integrates into any Building Automation System, so you will always know the operational status of the chiller.



**The WaterFurnace patented 6-pipe header rack can provide diverse heating and cooling loads in a single unit.**

## BUILT FOR COMMERCIAL APPLICATIONS

With simultaneous heating and cooling capabilities, heat recovery and industry-leading efficiencies, the WaterFurnace TruClimate 500 are redefining flexibility for the commercial and industrial markets. Whether you are planning a new building or replacing aging equipment, the modular cabinet design and patented 6-pipe removable header rack are a perfect fit.

## FLEXIBILITY

### UNMATCHED FLEXIBILITY

*From form to function, it adapts for your needs.*

Each chiller comes with fork pockets and lift points built into the cabinet. They can fit through standard 36-inch doors and on freight elevators, and even passenger elevators making them an excellent choice for retrofit or construction. Besides offering simultaneous heated and chilled water, TruClimate 500 units can be installed on an as-needed basis. The HydroLink2 supervisory control panel simplifies BMS integration while operating a modular chiller bank as a single chiller.

- Unit modules can be separated from their header rack for maximum maneuverability, creating the smallest footprint in the market.
- Time crunch? The pipe rack can be shipped ahead of the chiller to maintain project timelines, multi-phase projects and mechanical room layout optimization.
- Refrigerant venting requirements are simple to achieve with this modular setup, as opposed to a large 300-ton chiller.

### ENHANCED RELIABILITY

*The WaterFurnace Hydrolink controls platform provides tighter temperature control while maximizing chiller efficiencies.*

- Advanced controls with communicating controller, allowing compressor information to be available at the front end
- Modulating isolation valves provide the ability for rapid responses to system fluctuations
- Head pressure control, envelope protection is implemented in every chiller
- Remote accessibility allowing for support and diagnostics from trained personnel

### DC INVERTED COMPRESSORS

On the 30- and 50-ton module sizes, optional permanent magnet DC inverter drive lead scroll compressors are available to increase capacity turndown and efficiency. DC inverted compressors offer 8:1 turndown per module.

### OPTIMIZED FOR PEAK PERFORMANCE

The TruClimate 500 has an ultra-quiet design, and it exceeds ASHRAE 90.1 efficiency requirements.





## ASK US HOW YOU CAN SAVE UP TO 50% ON YOUR NEXT COMMERCIAL PROJECT

With the Inflation Reduction Act, projects completed with a geothermal loop and heat pumps may qualify for:

- 30% bonus rate
- 10% bonus rate for domestic content
- 10% Energy Community bonus
- Up to \$5 per square foot tax deduction
- 5-year accelerate depreciation and a 1-year bonus depreciation



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