

gForce Product Line

Hinged Electrical Box – All connections and fuses are clearly labeled. Hinged door swings out to provide easy front access to compressors, steam generator humidifier and custom components.

DAP III – Proven microprocessor for precise control of temperature, humidity and efficient operation. Optional communication cards allow direct monitoring by most major building management systems (BMS). Optional Zone Master card permits coordination among other Data Aire units and BMS communication.

Dual Scroll Compressors – Universally regarded as the most efficient and reliable compressors available. Compressors are individually accessible behind electrical panel, available in R-410A or R-407C as standard.

Evaporative Coils – "A" frame and interlaced coils using rifled tubing provide the most efficient heat transfer possible.



Steam Generator Humidifier - Easily accessible behind hinged electrical panel, it is highly efficient and completely self-contained for low maintenance.

Isolated Control Section – Control section including electrical panel, compressors and humidifier are physically separated from the fan section allowing true operational readings.

Backward Curved Plenum Fans with Electronically Commutated (EC) Motors - Provide radially dispersed air for more uniform static pressure. Reduces periodic maintenance and eliminates belts, pulleys, shafts and external bearings.

Every Data Aire unit is factory run tested and must pass a rigorous series of quality tests in order to be approved for shipping.

Most Data Aire units are available in air or water/glycol cooled, or chilled water configurations. Scroll compressors are standard unless otherwise specified. Smaller non-floor units are available in packaged or split systems.

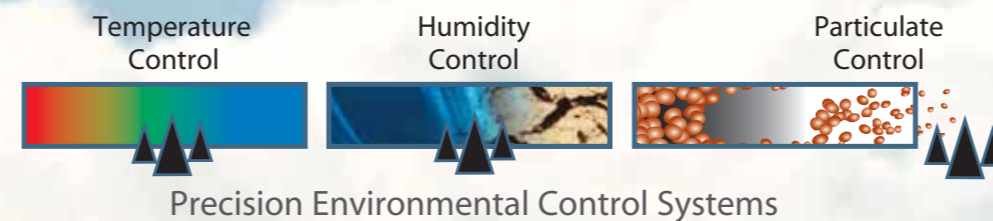


Data Aire made history when we engineered one of the first mission critical cooling system for computer rooms. With this first pioneering step a whole new industry was born. After almost five decades, Data Aire continues to lead the industry with the most advanced solutions to today's environmental control needs. From precision spot cooling for individual rack applications to sophisticated multi-facility central control systems Data Aire can deliver the solution.

Whether you are looking for an "off the shelf" solution or a system built to your exact specifications, Data Aire's global network of experienced support engineers are ready to assist you in getting the job done on budget, on time.

For more information on Data Aire products and services visit our website at www.dataaire.com or call (800) 347-2473.

Mission Critical Cooling Products



*Saves your data.
Saves your money.
Saves the planet.*



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gForce Units

gForce

gForce is the most advanced mission critical cooling equipment available on the market today. These units are the most efficient and economical while complying with strict environmental requirements.

Incorporating backward curved plenum fans with electronically commutated (EC) motors these units supply radially dispersed cooling air at lower speeds allowing for more uniform static pressure across the room. These fans, with integral DC motors, run at lower temperatures providing more net cooling from the computer room air conditioning (CRAC) unit. DC motors are more energy efficient, providing an on-going savings year after year.

Every gForce is equipped with a DAP III microprocessor to ensure the most efficient operation, provide communication capabilities with all major building management systems (BMS), and allow customized unit performance to match your particular needs.

gForce DX - dual circuit units are available in either upflow or downflow configurations with either R-407C or R-410A refrigerant and range in size from 21 to 106 kW. DX units increased efficiency with the use of rifled tubing in the cooling coils to promote the greatest amount of heat transfer.

gForce Chilled Water units range in size from 7 to 211 kW and all but the 211 kW are available in either downflow or upflow configurations, the 211 kW unit is only available in downflow. Like the DX version each comes standard with a DAP III processor for unit monitoring and communication.

Every gForce unit is factory run tested and put through a vigorous quality control procedure.

gForce GT

The gForce DX product line is also available in single circuit machines ranging in sizes from 7 to 46 kW. Our GT product line has many of the standard features of the dual circuit machines including backward curved plenum fans with electronically commutated (EC) motors, availability of either R-407C or R-410A environmentally friendly refrigerant, efficient heat transfer cooling coils using rifled tubing, DAP III microprocessor and many other additional features.



Floor Mounted Units - Data Aire and Data Temp Series

Data Aire Series - 6 - 30 ton DX or 7 - 50 ton chilled water

The culmination of nearly fifty years of mission critical cooling expertise is embodied in the Data Aire series product line. Standard features include: dual scroll compressor for reliability; Data Alarm Processor III (DAP III) microprocessor for optimal operational control; and electric reheat and steam generator humidifier for precise humidity control with minimal maintenance. The Data Aire series has a large array of options to select from allowing for a perfect match to your requirements. Our DX version is available in air or water/glycol cooling with energy saver (dual source cooling) for energy efficiency. Both the DX and the chilled water versions come with either upflow or downflow discharge.



Modular Data Temp - 8, 10, 13 ton

This unit was designed to provide large capacity cooling in a very compact footprint when access or floor space is limited. Due to its compact design, the Modular Data Temp can fit into tight spaces, such as small elevators in older buildings. The single circuit unit includes an "A" frame coil, steam generator humidifier, scroll compressor and electric reheat. Data Alarm Processor III (DAP III) microprocessor controller is standard. The Modular Data Temp is available with air or water/glycol cooling.

Data Temp 2, 3, 4, 5 ton

Designed for lighter duty cooling needs where flexibility of upflow or downflow air discharge is required, this single compressor unit has many of the standard features found on the Data Aire Series. Including Data Alarm Processor III (DAP III), steam generator humidifier and electric reheat for optimum space control.



Ceiling Systems

Mini Ceiling System - 1, 1.5, 2, 2.5 tons

This unit is designed with the greatest variety of air supply and return options in the industry and only 24" high for maximum installation flexibility, designed to fit easily above a 2'x 4' T-bar ceiling. The Mini Ceiling unit is available in air, water/glycol cooled or chilled water and in split or packaged configurations. Mini's come standard with a wall mounted thermostat but can be upgraded to a Mini DAP II, Mini DAP III or DAP III for additional control capabilities or communication with the BMS.



Mini-Plus Ceiling System - 2.5, 3, 4, 5 tons

Should your requirements demand larger tonnage and ceiling installation is desired then the Mini-Plus is your answer. Most configurations are only 24" in height (only the vertical plenum and energy saver require additional height) and offer a wide variety of installation options with ducted and/or direct supply and return. The Mini-Plus comes with air, water/glycol cooled or chilled water and is available in split or package configurations. Standard controller is the Mini DAP II but can be upgraded to the Mini DAP III or the DAP III for increased control or BMS communication.

LCS - 6, 8, 10, 13 ton

When floor space is limited and large tonnage cooling is required the LCS is the optimal solution - the largest ceiling mounted unit in the industry. The LCS is a split system available in air, water/glycol cooling with either single or dual compressors/circuits or chilled water. Mini DAP II is the standard microprocessor controller but upgrade to the Mini DAP III or the DAP III is an option. Many other options are available to meet your requirements.



Miscellaneous Systems

Shelf System - 2, 3, 4 ton

When neither floor nor ceiling space is an option, such as a telecommunication closet, Data Aire offers the Shelf unit. This unit is mounted on the wall with all components serviceable from the front panel. Refrigeration options include air, water/glycol cooling or chilled water in split or packaged configurations. Mini DAP II comes standard with the option to upgrade to the Mini DAP III or the DAP III.



Data Cool - 2, 3 ton

Whether you are in a large data center with out of the way areas or a confined space with several high powered computers, cooling can be a difficult problem. Data Cool is small in size, allowing it to fit in the minimal amount of space while providing a high degree of cooling. You also have the option of air or water/glycol cooling; or if your facility is equipped with a chilled water system, you can use it to remove the heat. Data Cool comes standard with an electronic control but can be equipped with a Mini DAP II, Mini DAP III or DAP III providing a wide range of controls and direct communication to your building management system (BMS).



Unity Cooling Units



Unity Cooling - 10, 20 and 30 kW units

High heat density solution that is economical, versatile and scalable! For use across an entire data center or to resolve a high heat density load in as little as one cabinet - Unity Cooling is the answer. Unity Cooling system comprises two fan cartridges, host, chassis and duct. Installs easily to any server rack without additional

refrigerant lines and dynamically matches outflow to the volume of the server fans. This dynamic fan control, based on pressure within the cabinet, provides hot aisle/cold aisle containment without infiltration of cool air or exfiltration of hot air to the data center. Fan cartridges are hot swappable and capacity can be increased or decreased easily, with different fan cartridges, to match the need of the particular cabinet.



Controls



Data Alarm Processor III (DAP™ III) - Data Aire's Data Alarm Processor III (DAP III) monitors and controls the air conditioner's functions and room conditions. This advanced microprocessor comes with flash memory and a USB port for easy upgrades to the firmware. It was designed on a modular concept allowing the user to add modules for increased functionality as the need arises by merely attaching internal boards. The new hierarchal menu system allows for quick and easy programming. By adding a communication card, DAP III can communicate directly with popular building management systems (BMS).

Mini-Data Alarm Processor-II (Mini DAP II) - this wall mounted microprocessor, standard on the LCS, Mini-Plus and an option on the Mini Ceiling unit, controls temperature and humidity while providing many of the same diagnostic and alarm features of the DAP III. Mini DAP II has a seven day programming format and offers a secondary schedule for energy efficient operation. A 16 character liquid crystal display allows for easy programming and display of current conditions, codes are not used providing clear communication.



DARA-4 (Data Aire Relay Auto changeover) - controls up to four Data Aire units using relay contacts. The DARA-4 provides unit rotation, backup capacity, at a very affordable price.

The DARA-4 ensures that all units in an operation operate at near equal run times. The controller has the capability of rotating two to four units with rotation being set to 4, 8, 12, or 24 hours or 7, 14 or 30 days. Or you can choose not to automatically rotate the units - you are in control.

Communication Cards

Communication with any major building management system (BMS) or building automation system (BAS) is easily accomplished with the addition of an optional communication card. There are three communication cards, designed around families of open communication protocols. These communication cards insert into the DAP III and allow monitoring and in some cases control of the precision cooling unit by the building system. Installation is simple and can be done at any time, at installation or later.

Zone Master

Zone Master network cards provide unit lead/lag, rotation and prevent units in the zone from performing conflicting operations, such as humidification and dehumidification, simultaneously. While performing these vital functions the units can still be connected to a BMS or BAS system for monitoring and changing of settings. Zone Master cards can handle up to 32 Data Aire units. Like communication cards, these cards plug directly into the DAP III and can be installed at any time.

Condensers/Fluid Coolers

Condensers 3 - 100 ton Fluid Coolers 6 - 100 ton

All condensers and fluid coolers supplied by Data Aire are manufactured and tested by Data Aire personnel. These units are ruggedly designed with aluminum exteriors and powder coated fan guards to eliminate rust. Coils are constructed of copper tubes with aluminum fins for maximum heat transfer.



Shown here. Equipped with EC motors for increased energy efficiency.

All units are vertically discharged providing protection from external wind conditions and are equipped with internal thermostats for energy efficiency. Condensers are equipped with low pressure override timers and variable speed fan controls, with transducers, to ensure positive start-up at lower temperatures. Fluid coolers include surge tanks and fill valve, pump contactor and fan cycling control with integral factory wired and tested control panel for efficient operation.

Both condensers and fluid coolers are available in low decibel versions in the same capacities capable of meeting most noise restrictions.

When conditions require, Data Aire offers indoor air cooled condensers or indoor fluid coolers. Indoor air cooled condensers are available from 6 to 28 ton, indoor fluid cooler range from 6 to 17 ton.

