



GUIDE TO TEMPORARY AIR CONDITIONING HEALTHCARE SECTOR

Regardless of the season, air conditioning is a must for most environments within the healthcare sector, especially when you consider that the ambient temperature can be significantly increased by medical and computer server equipment. Even if a fixed permanent system is installed, this equipment can be old, overworked and at risk of resulting in a breakdown - particularly during heatwaves. The ideal solution is to consider renting temporary air conditioners or fluid chillers as a cost-effective way of dealing with climate control when you need it.

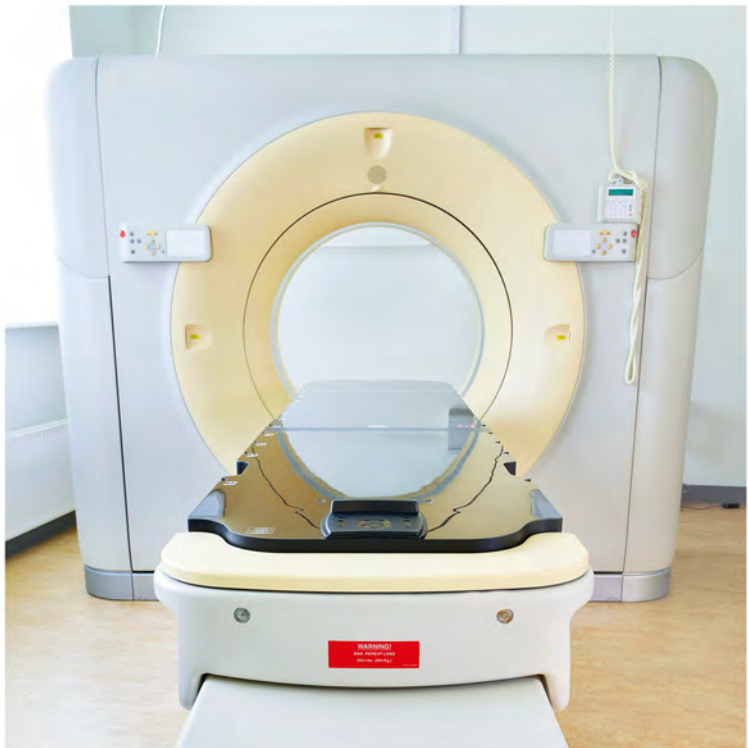
Air conditioning is widely used in the healthcare sector. Comfort cooling for patient wards is vitally important in hospitals, surgeries, clinics and other healthcare facilities, both in a supplementary form and in the event of existing equipment failure.

Temperature-sensitive environments such as MRI rooms and pharmaceutical storage facilities need to remain cool to maintain their functionality. The repercussions of this equipment failing can be catastrophic. It can tarnish the reputation of the hospital, cause distress to both patients and workers, and the financial implications can be huge if the equipment needs to be replaced. Hygiene is also an absolute priority in the healthcare sector to maintain infection control. It is important to consider a supplier that has an up-to-date, well-maintained fleet of equipment, and can offer cleaning regimes for long-term hires to cope with the demand of hygiene standards.

The use of air conditioning is not strictly for temporary or emergency applications. Many building owners and managers use

temporary cooling solutions on a long-term or permanent basis to supplement the existing HVAC system or to deliver additional cooling to areas where the heat loads have increased.

Air conditioners can also be used to provide cooling for server rooms and office suites in addition to the more obvious applications in the healthcare sector. These air conditioners provide faster, easier and more cost-effective solutions than the installation of an expensive central air conditioning system. In addition, these systems offer a more flexible option for sites that are under repair or renovation and temporary modular buildings.



How does a Temporary Air Conditioner work and what are their benefits?

Temporary air conditioners work similarly to other air conditioning systems, by drawing warm air into the unit before passing it over an evaporator to cool the air. This cooled air is then blown back into the room and the warm air is expelled via a duct or heat exchange unit.

One of the main benefits of temporary air conditioners, and what differentiates them from permanent cooling systems, is their mobility. Regardless of the cooling requirement, a temporary air conditioner will be able to satisfy it without necessitating the implementation of a costly permanent installation. Other benefits include:

- More affordable than installing a conventional air conditioning system
- Minimal installation
- Much more energy efficient than a central air conditioner
- Dual-purpose of not only cooling air, but dehumidifying air

It is critical to assess the size of the area in which cooling equipment is required. If you need assistance in sizing your space, a temporary air conditioning expert would be a great resource. Make sure your provider offers a free no obligation site survey.

Temporary air conditioning solutions are available in many sizes and configurations ranging from 1kW through to multi-megawatt packages.

Here are a few factors to consider when sizing a temporary air conditioner:

- Size of space being cooled
- Level of insulation
- Available power supply
- Internal heat loads such as electrical equipment, people and lighting
- Whether the portable cooling unit(s) will be installed inside or outside the space



Types of Temporary Air Conditioners

AIR-COOLED portable air conditioners pump in cool air and exhaust warm air from the condenser coil. The condenser is exhausted/ducted out of the space using flexible duct. The warm condenser air is most typically exhausted out of a window or ducted into a ventilated ceiling void.



Because of the ease of installation, air-cooled portable units are most often the system of choice for hospital wards, server rooms and a host of other applications in which a source of air conditioning is required.

WATER-COOLED (split units) portable air conditioners operate similarly to air-cooled models, except, instead of air, water is circulated through the condenser coil of the unit by connecting to a heat exchange unit which normally sits outside. These units have a wide variety of applications and are ideal for the healthcare industry, IT facilities and server rooms.



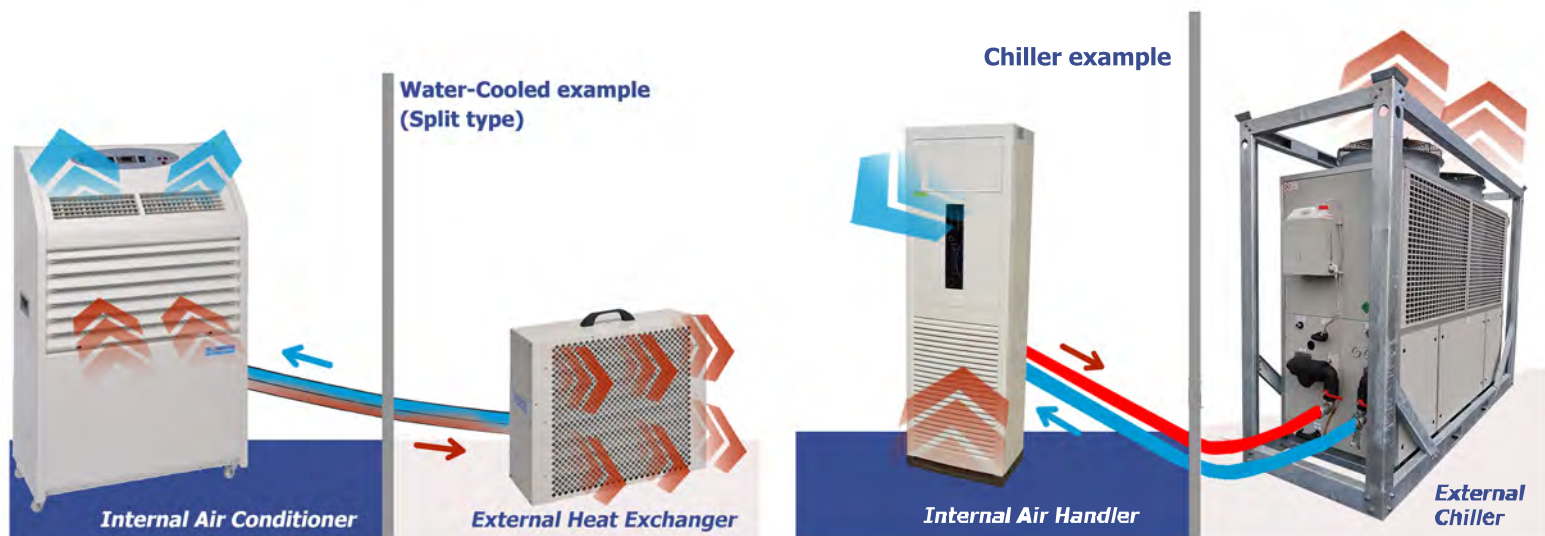
Water-cooled systems do not require exhaust ducts, so they are often specified when there is not a convenient way to exhaust hot air out of the room. Typical applications include wards, laboratories or inner spaces with no opening windows

CHILLERS produce chilled water that is used to cool the air that ventilates a building via the use of fan coil units or air handlers. These units have a larger footprint than portable air conditioners and are typically deployed outside the target application.



With cooling capacities of up to 750kW from a single unit, our chillers are designed to high specifications, use the very latest refrigerant gases and are frequently tested to guarantee best practice. Ideal for high volume cooling in larger applications, our chiller units are commonly deployed within the healthcare sector, particularly for staff comfort cooling and pharmaceutical storage.

AIR HANDLING UNITS allow the distribution of cool air throughout an intended area and feature integrated condensate pumps and variable speed fans for complete control. Easily connected to either a chiller or boiler unit, our air handlers are also simple to manoeuvre into position and offer cooling capacities of up to 300kW from a single unit. Economical, safe and reliable, our air handling units offer an alternative to portable air conditioning systems and are ideal for wards, operating theatres and patient waiting areas.



Selecting a Temporary Air Conditioning supplier

With countless portable cooling equipment suppliers out there, how do you select the right one? Here are a few questions to ask when evaluating your options:

- Will the provider assist in determining your cooling needs and size the right equipment for your specific application?
- Does the provider offer delivery and installation as well as a set-up service?
- Does the provider offer both hire and purchase options?
- Does the provider have ample stock of equipment to meet your needs at a moment's notice?
- Does the provider offer a 24/7 emergency response service?
- Is your supplier accredited to ISO 9001:, ISO 14001: and OHSAS?
- Does your supplier have a national coverage?
- Can your supplier deliver same day?
- Will your supplier respond to breakdowns within 4 hours?

Your temporary cooling equipment supplier should be an integral partner for all facility, maintenance and estate managers in the healthcare sector. The supplier should provide you with the knowledge, expertise and confidence to successfully cool your next project.

