

# Data Centres

Australia's data centre environment is rapidly evolving as our appetite for technology creates more data. In fact, such is the growth in data centres globally that some predict the ICT industry will consume as much as 20 percent of the world's electricity supply within the next five years.

Among the key drivers we see in the data centre market are energy efficient cooling, such as free cooling, and a reduction in capital cost.

## Features of our Data Centre offering:



System availability, resilience and redundancy for uninterrupted operation



Maximising plant efficiency and energy use



Maintainability of plant



Compliance with regulatory standards and codes



Cost reductions through improved efficiency and minimisation of interruptions



Improvement reviews as an ongoing process



## Providing an efficient and reliable environment

Airmaster has provided mechanical and building services maintenance to enterprise and managed data centres across Australia for many years. We understand the mission critical role that data centres perform, and the significant energy penalty associated with their function. Airmaster has a strong track record in delivering technical services that deliver measurable improvements in energy efficiency, plant and equipment reliability and operating costs.

## Integration at every level

	HVAC	FIRE	BMS	ELECTRICAL
<b>Core Services</b>				
Maintenance	✓	✓	✓	✓
Service and Repairs	✓	✓	✓	✓
Projects, Retrofits and Installations	✓	✓	✓	✓
<b>Advisory Services</b>				
Energy	✓		✓	✓
Design	✓	✓	✓	✓
Commissioning	✓	✓	✓	✓

From the Service and Maintenance of mechanical and building services including HVAC, to the delivery of Fire and Essential Services, and the implementation of Smart Building Automation, our solutions are designed to reflect your specific needs.

Whether your aspirations are to optimise system performance, reduce energy consumption or meet regulatory compliance requirements, Airmaster Advisory brings together the full suite of the company's expertise and knowledge to support the whole-of-life management of our customers' properties.

## Restarting and operating facilities in a COVID-19 world

With facilities having an eye to a future operating within a COVID-19 environment, it is clear that there are new operational challenges to face. Airmaster is ensuring that we work closely with our customers to develop a strong, measured, and tactical COVID-19 risk mitigation plan that combines the latest technologies with new maintenance practices.

Acknowledging the challenges faced in this new environment, Airmaster offers a suite of technologies and enhancements to traditional services that ensures risks are mitigated and efficiency is maintained.

### IAQ Monitoring and Occupant Information

Existing BMS infrastructure can provide the ability to measure and verify indoor air quality parameters by adding sensors where there are gaps in the required data.

The information and intelligence gained from these sensors can then be utilised to change control parameters in the HVAC system and to provide instant feedback and information by way of easily accessible dashboards for employees, occupants and visitors.

### Air Scrubber Technologies

The latest generation of air scrubber technologies use phase change or absorbent materials that automatically regenerate when saturated. These systems clean and recycle internal air and remove pollutants without the energy impact, since ventilation air is reduced to the minimum design rate. The key to these new generation of air scrubber technologies is the advancement in absorbent materials that are highly effective but also able to regenerate using low temperature heat.

### UV Lighting Disinfection Systems

The deployment and treatments delivered by UV-C technology eliminates your HVAC systems as a potential source of coronavirus infection. With a 98%+ kill rate of coronavirus, the added benefit in a well designed UV-C application is the continuous cleaning of cooling and heating coils, with a resultant decrease in pressure drop and a subsequent reduction in fan energy consumption.

### Ventilation and Filtration

Considered vital in providing healthy spaces within facilities, ventilation strategies, such as demand control ventilation (DCV) can ensure humidity is kept in the ideal range of 40-60%. Through multi-faceted sensor technologies and existing BMS control algorithms, DCV strategies are further enhanced by actively monitoring key contaminants that vary the amount of ventilation air in order to meet pre-determined optimal dilution levels, ensuring occupant safety and comfort.



### Airmaster Fire

Fire and Essential Safety Measures are an important, ongoing regulatory requirement for building owners, with all public buildings obligated to ensure regular maintenance under the Building Code of Australia. Airmaster ensures buildings remain at the required operational level throughout their life, helping owners navigate through the complexities and multitude of various components, ensuring full compliance with Australian standards.



## Delivering real value through our latest technology solutions

Airmaster remains a leader in the implementation of technology solutions in the built environment – evolving with the HVAC industry to introduce competitive technologies and systems that extend real value to our clients by delivering proven cost savings, real-time results and a fast return on investment.

Our experience and expertise in the latest building services technology includes smart IoT solutions in Automation and Controls, the use of data and analytics in Intelligent Maintenance and eEvaluate in conducting accurate Asset Auditing and Management.

## Energy Efficient IoT Solutions

Our factory-trained Controls and Automation team are able to redefine what is possible when integrating disparate technologies in buildings. These technologies enable entire buildings to constantly improve operation, efficiency and innovation by consolidating multiple systems into a single platform.

Airmaster has partnered with the world's industry-leading BMS Integrators and Technologies to offer our customers a comprehensive range of solutions that are fully customisable with an energy efficient approach.



## Delivering world-class, globally certified smart solutions

Airmaster Automation are a Schneider Electric trained and certified EcoXpert, ensuring best in-class technologies, all-in-one solutions and services, integrated lighting control and power metering solutions. As an EcoXpert, Airmaster can deliver a professional analysis of your building's energy situation and offer tested, validated, and documented solutions that meet your needs and investment capabilities.



## Turn your plant room into a value-generating asset

In healthcare facilities, HVAC is an energy intensive system, accounting for a significant amount of the total energy consumption. Every efficiency improvement in HVAC performance can significantly reduce the energy profile of the facility, turning HVAC optimisation into a value generating opportunity.

Energy saving opportunities are often missed in this complex technical arena. Created with an in-depth understanding of all thermodynamic variables involved in managing plant room HVAC equipment, PlantPRO enables optimum control of every device and its integration into a single synergistic system.



## About Airmaster

Airmaster is an award-winning building services company, providing HVAC&R management, smart building solutions and fire services across Australia, New Zealand and South-East Asia. Founded in Melbourne in 1988 and with 13 branches across Australia and New Zealand, Airmaster's holistic approach to building management makes for a comprehensive range of service offerings.



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