

## [Addressing data centre operational challenges through thermal management technologies](#)

Covering a review of:

- The different thermal management solutions available
- The data centre requirements
- Constraints that should be considered
- The best technologies available for a tailored solution

## [Direct expansion – solutions and free cooling options](#)

Covering a review of:

- The main components and technologies used
- Analysing units such as outdoor condensers and floor mount units installed inside the data centre
- The control philosophies to help maximise overall system efficiency
- The freecooling options available for DX solutions and how they help achieve system efficiency

## [Chilled water – systems and data centre optimisation, intelligent platforms for optimum system control and Tiers of availability in hydraulic systems](#)

Covering a review of:

- Reaching optimum system control with indoor and outdoor units
- Advantages of chilled water systems
- The different solutions available: air-cooled, freecooling, adiabatic
- The tiers of availability defined by the Uptime Institute

## [Adiabatic and evaporative cooling – basics of psychometric and solutions for data centre applications](#)

Covering a review of:

- Definition to the main psychometric behind the technologies
- Wet and dry bulb temperature, dew point, etc.
- The available solutions for data centre applications
- Controlling the freecooling units

## [Effective humidity control for data centre applications](#)

Covering a review of:

- How potential issues relating to poor humidity control can be addressed
- How direct freecooling impacts humidity control and what areas to watch out for
- Which technology delivers effective control and efficiency savings

## [The airflow configuration in data centre applications – cold aisle containment, smart perimeter cooling and smart in the row cooling](#)

Covering a review of:

- How to optimise air distribution
- Cold aisle containment
- The various configurations that perimeter cooling can offer
- The advantages applicable to in the row cooling