

# ColdLogik Management

## System (CMS)

The ColdLogik Management System (CMS) lies at the heart of the **ColdLogik** solution.

The room ambient temperature is controlled locally at cabinet level by the CMS. It automatically adjusts the fan speed, water flow rate and, if necessary, the output water temperature from the cooling medium – the result is a consistent delivery of cooled air into the data centre, with no operator intervention.

The whole process can also be overseen and controlled at individual cabinet level, room level and remotely via any of the industry standard communication protocols.

The CMS is either built into the cooler or a 2U high and can be rack mounted or fitted on top of the cabinet or under floor. It ensures all variants of the **ColdLogik** system operate on a 'sensible cooling' principle – 'water above dew point' – and the system remaining free of condensation.



The ColdLogik Management System (CMS) unit. It lies at the heart of the **ColdLogik** Rear Cooler solution.

The CMS set up/commissioning tool is used to define all the required parameters at commissioning.



## ColdLogik Management System (CMS), continued

The **ColdLogik Management System (CMS)** is configurable to suit each installation and includes these:

- Coolant flow control (0 to 10V).
- Integral 24V AC motorised valve supply.
- 0 to 10V or 5V PWM EC fan control.
- Single or dual bank fan speed control.
- Fan periodic functionality test.
- Chiller regulation based on room values and set point.
- Industry standard thresholds and differentials on all user definable parameters.
- Valve (coolant) opening command monitoring.
- Return water temperature monitoring.
- Individual fan monitoring with the communication protocols Modbus, Transparent Local Area Network (TLAN) and fieldbus system options – other industry standards available.
- Full status monitoring via Modbus.
- Network BMS or volt free contact connections for room monitoring, individual fan fail alarm and a common alarm.
- Local door alarm indicator – colour change on door logo.
- High and low temperature alarm.
- User definable periodic preventative maintenance alarms.
- Full alarm log (requires commissioning tool to access and reset).
- User definable time delays on alarm functions.

### System options

- Dual and single power supply change over.
- Power fail alarm on supply change over.
- Leak prevention detection alarm.
- Processor monitor fail safe.
- Programming key for simplistic transfer of commissioning data to another CMS.
- Local individual cabinet display screen.
- System display monitor and log up to 300 CMS via the RMS.
- Set up/commissioning tool.