

Leak Prevention System (LPS) with Cooling Distribution Unit (CDU)

The patented **Leak Prevention System (LPS)** with **Cooling Distribution Unit (CDU)** enables the flow and return water supply within the data centre – including all pipe work, hoses and rear coolers – to be put on a negative water circuit. This allows the system to operate without the fear of leaks or water damage to critical equipment or room infrastructure.

In the event of a breach in the water circuit, air is drawn into the system preventing leaks – the resulting air is taken back to the CDU / LPS or strategically placed vents in the circuit where it is vented out of the system and reported to the **Room Management System (RMS)**.

Critically, this ensures that the system continues to operate without affecting the room ambient temperature and any remedial work can be carried out when convenient ensuring maximum uptime.

As with all aspects of **ColdLogik**, the LPS can be retrofitted to an existing circuit. It is modular and scalable in design – as your data centre grows, so can the **ColdLogik** liquid cooling system.

In many cases it is necessary to tap a water supply off a chiller which already supplies chilled water to an existing systems within the same building but at much lower temperatures than are required by **ColdLogik**.

If chilled water from the primary circuit were to remain at this temperature, it would create condensation within the **ColdLogik** coolers. The CDU / LPS provides close control cooling to the rear coolers, eliminating the potential of condensate.

The process side, or secondary circuit, is a sealed pressurised system with the heat extracted from the coolers being rejected to a raw chilled water circuit via a stainless steel plate heat exchanger.

Unlike most CDU units however, our heat exchangers are much larger and can accept water up to 75.2°F while still maintaining the data centre below 80.6°F (ASHRAE class 1).