

AHx180

Liquid-to-Air CDU

CoolIT
systems™

MAXIMUM POWER, PERFORMANCE OPTIMIZED

Engineered for maximum performance, CoolIT Systems' AHx180 is a high-density, airflow-to-power optimized liquid-to-air coolant distribution unit (CDU). The AHx180 CDU provides 180 kW cooling capacity in a 2-rack footprint for multiple artificial intelligence (AI), high-performance computing (HPC) and high-density enterprise direct liquid cooled (DLC) servers without requiring facility water.

FEATURES

- 180 kW cooling capacity at 15°C approach.
- 2 x high-performance pumps.
- 4 x high-efficiency fans.
- All stainless-steel piping.
- Slim 2-rack footprint (1200 mm W x 1066 mm D / 47.2" W x 41.9" D).
- Integrated sensors: flow, pressure, temperature, humidity, coolant level and leak detection.
- Integrated 50 µ serviceable filter with 25 µ to 150 µ options.
- Group control for up to 20 units.
- Integrated control and monitoring system (Redfish, SNMP, TCP/IP, Modbus, BACnet and others).
- PLC-based control system with 10" front panel touchscreen.
- Multi-language support.
- Integrated fill pumps and reservoir.
- Redundant pumps (2N) and fan (N+1).
- Optional ATS.
- Field replaceable fans, pumps, piping and sensors.
- Easily accessible drain and reservoir tanks.



Figure 1 – AHx180 Front View

AHx180

Liquid-to-Air CDU

CoolIT
systems™

ADVANTAGES

- **COOLING CAPACITY.** High capacity liquid-to-air CDU at 180 kW.
- **NO FACILITY WATER REQUIRED.** Supports common hot and cold aisle data center architecture.
- **FLOW PERFORMANCE.** Over 1.5 LPM / kW to support high TDP chips. Delivers 270 LPM at a 40 psi external pressure drop under single-pump operation.
- **DYNAMIC RESPONSE.** Immediate response to fluctuating heat loads eliminates thermal spikes and shock risk.
- **SYSTEM EFFICIENCY.** Low CFM and power consumption per kW of heat dissipated. Dynamic heat load management for variable thermal loads.
- **HIGH-RELIABILITY DESIGN.** All stainless-steel piping and hygienic fittings. Real-time performance and system health monitoring with notifications and alerts. Automatic condensation prevention. Built-in 50 µ filter.
- **REMOTE MONITORING & CONTROL.** Secure remote monitoring and control via Redfish, SNMP, TCP/IP, Modbus, BACnet and other protocols.
- **GROUP MANAGEMENT.** Supports up to 20 CDUs connected to the same secondary piping network.
- **SERVICEABILITY.** Field replaceable fans, pumps, piping and sensors.
- **SUPPORT.** Complete service support in over 70 countries, including end-to-end design, installation, CDU to server system validation and optimization, and maintenance.
- **SUPPLY.** Available in volume from CoolIT's Canadian manufacturing facility.
- **DENSITY.** Highest performance in a two-rack footprint.
- **PRECISE TEMPERATURE, FLOW & PRESSURE CONTROL.** Consistent cooling ensures efficient operation and system reliability.
- **HIGH AVAILABILITY.** Built-in redundancies, continuous monitoring and hot-swappable components.

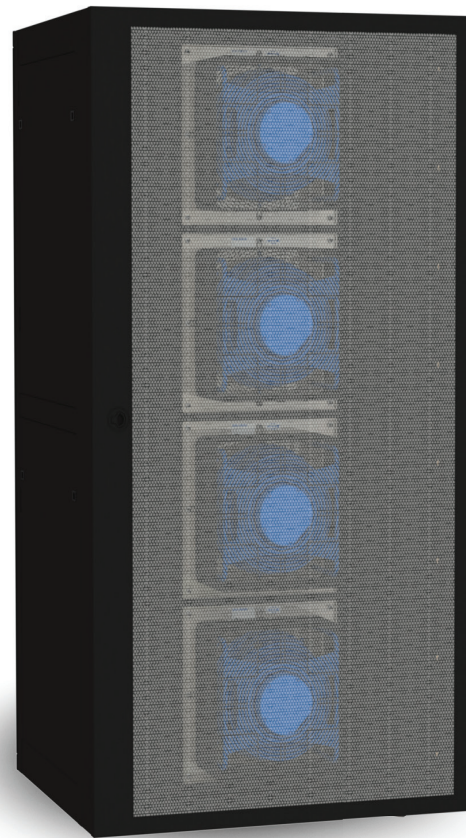


Figure 2 – AHx180 Rear View

Visit www.coolitsystems.com/ahx180-cdu for product specifications