

Liquid Cooling Monitoring Reference

Coolant temperature, flow, pressure, leaks and CDU status — read together with rack power

What to monitor

CDU operating status

Operating mode, pump status, redundancy state, unit alarms

Inlet & outlet temperature

Supply and return along the loop — how the loop is performing

Pressure & flow

Pressure differential and available flow from supported interfaces

Leak detection

Sensor events placed beside facility, rack, and equipment info

Temperature & humidity

Room and zone conditions around high-density equipment

Rack power density

Device and PDU data: the heat source next to the heat remover

Reading the loop together

What you see	What it usually indicates
Supply temperature rising, equipment load unchanged	Cooling plant condition
Return temperature rising, supply stable	More heat from workload
Flow indicator falling, pump status unchanged	Restriction, filter, or valve
Pressure differential changes, flow does not follow	Hydraulic path altered

A practical cooling risk workflow

Detect → **Locate** → **Assess** → **Respond** → **Review**

Where it fits

- Monitor CDU health across multiple rooms, organized by site and cooling zone
- Investigate a rising GPU temperature: node fault or cooling environment?
- Respond to a leak event with nearby racks and equipment identified
- Plan a high-density rack expansion from space + power + cooling together
- Identify constrained racks where power or cooling limits deployment despite free U

Scope: monitoring, correlation, alerting, and operational response — not automated control. Closed-loop adjustment of cooling equipment requires project-specific validation, supported control interfaces, and agreed safety procedures.