



Liquid Cooling

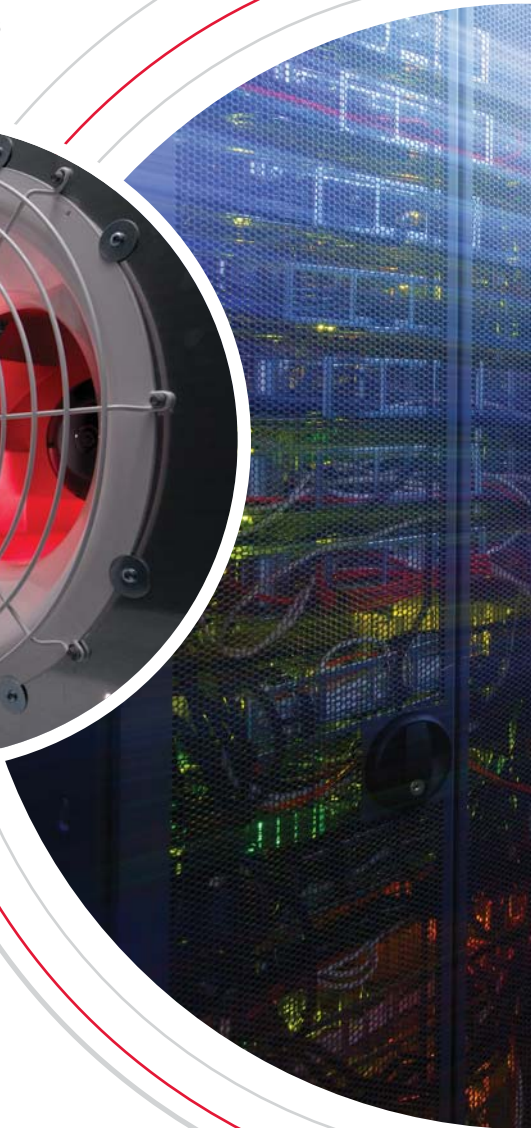
Data Center Technology

STATEPOINT™ LIQUID COOLING SYSTEM

The StatePoint™ Liquid Cooling (SPLC) system, a patented innovation by Nortek Air Solutions, is an industry-first in data center cooling. This new cooling design makes data centers more efficient at cooling by employing new cutting-edge technology. StatePoint uses an indirect exchange between water and scavenger air in an optimized, compact membrane heat exchanger that cools water by having the water evaporate through a membrane separation layer that prevents cross-contamination between the water and air streams.

The SLPC system features patented innovations, including the membrane heat exchanger as well as FANWALL TECHNOLOGY® that provides a level of quality that only Nortek Air Solutions can provide in custom air handling units specifically designed for data center operations.

StatePoint Technology® enables this innovative solution to be delivered to any data center design regardless of location or climate, optimizing reliability and performance requirements.



Your Benefits

- Operational flexibility for both power and water savings
- 20 - 30% less power usage
- 20 - 30% less water usage
- Less power during peak loads
- Simplification of design
- Humidity control
- Protection from outdoor contaminants
- Contains no refrigerants
- Lowered/reduced CO₂ emissions
- Reduction of required maintenance

Advantages

- High levels of operating efficiency
- More water efficient than direct evaporative cooling systems
- Power Usage Effectiveness (PUE) operation that is equal to or better than direct evaporative cooling systems
- Reduced water consumption: 20% in hot and humid climates and up to 90% in cooler climates
- Reduction in CAPEX requirements over traditional systems
- Eliminates need for mechanical cooling in a wider range of climate conditions



- Next-Generation Data Center Cooling Design
- Industry-leading power and water usage efficiency
- Combination of air and water flow for high cooling performance in a compact exchanger
- Eliminates chillers (under certain design conditions/location/climate) while providing more flexible cooling options

Advanced Evaporative Cooling Technology

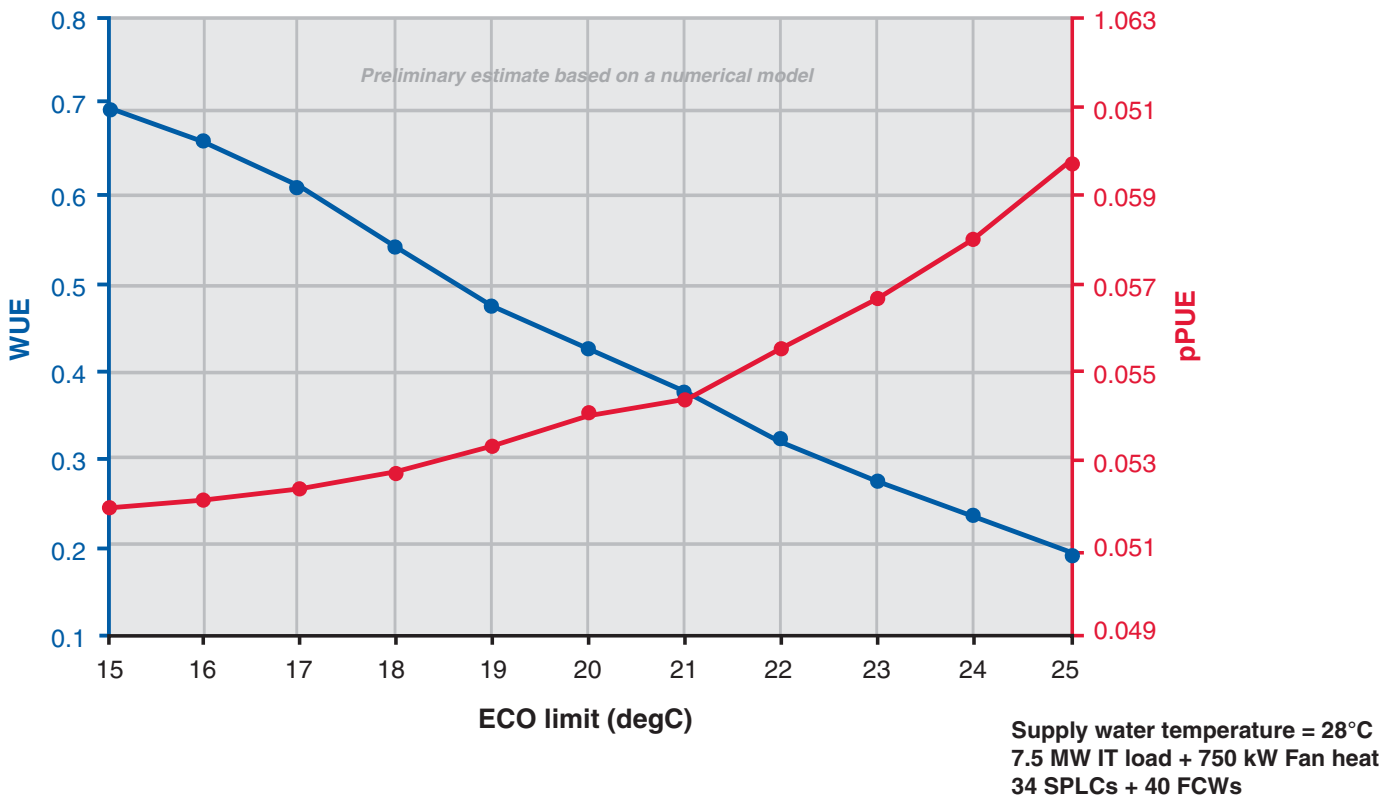
- Chilled water system that does not burden local water supplies
- High resiliency to scale formation and poor water quality for longer operational lifespans
- Water used as primary cooling medium, not air (heat capacity of water is four times that of air)
- Evaporative cooling produces cold water that cools inside air to achieve the cooling of servers

Patented Exchanger

- Patented membrane exchanger design allows some water to evaporate through membrane pores to cool the water
- Exchanger configured for both horizontal air flow or packaged conventional air handling units
- Membrane keeps the cooling water circuit separated from the air stream

Ease of Integration

- Simplification of external hydronic circuit requirements
- Cooling delivery connection to a variety of systems including fan coil walls, CRAH, air handlers, hot aisle enclosures, rear door heat exchangers, chip cooling and cold plates
- Integrated control of supply water temperature and distribution pumping



The logo features a red stylized 'N' icon to the left of the text 'NORTEK' in a bold, sans-serif font, with 'STATEPOINT' in a smaller font directly below it.

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STATEPOINT



Nortek StatePoint™ partners with some of the most renowned names in the tech industry to create next-generation solutions to data center cooling. StatePoint's liquid cooling technology can be found on some of the most prestigious data center storage facilities on the planet. Our world class team develops technology that is effective, sustainable, efficient and adaptive to many challenging cooling environments.

Specifications and illustrations subject to change without notice and without incurring obligation.

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