

# Data Centers

**A**S THE U.S. ECONOMY INCREASINGLY SHIFTS FROM PAPER-BASED to digital information management, data centers have become a vital part of business, communication, academic, and governmental systems. Over the last five years the increase in use of these systems, and the power and cooling infrastructure that supports them, have doubled energy use, increased greenhouse gas emissions and raised concerns about power grid reliability. (Source:EPA)

Data centers require continuous air conditioning to address increasingly high internal heat loads and to maintain indoor temperature and humidity levels within recommended equipment operating levels. Outside air



economizers, which bring in large amounts of outside air to cool internal loads when weather conditions are favorable, can potentially save a substantial amount of cooling energy.

Data Center owners and operators can now use OptiNet, with its ability to measure both indoor and outdoor environmental parameters, to maximize energy savings while ensuring equipment integrity.

Safely bring in cool, clean, dry outside air when conditions permit to reduce mechanical cooling energy needed to maintain space conditions. OptiNet senses humidity, airborne particulates, gases and other contaminants that are harmful to data center operations. This enables the airside economizer to cool with outside air when the temperature and air quality allow. If the outside air is dirty, laden with contaminants, or too wet, the economizer cycle is overridden and mechanical cooling continues.

## OPTIMIZE FACILITY PERFORMANCE

OptiNet interfaces easily to your building automation system providing accurate, reliable, low maintenance environmental sensing to provide you with the most efficient, safe operating environment for your critical systems.

- Maximize cooling energy savings via airside enthalpy enabled economizer
- Maintain required humidity levels
- Maintain clean air in the space
- Validate filtration systems



**OptiNet™**

Energy Savings, Safety, and Comfort for Today's Smart Buildings



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