








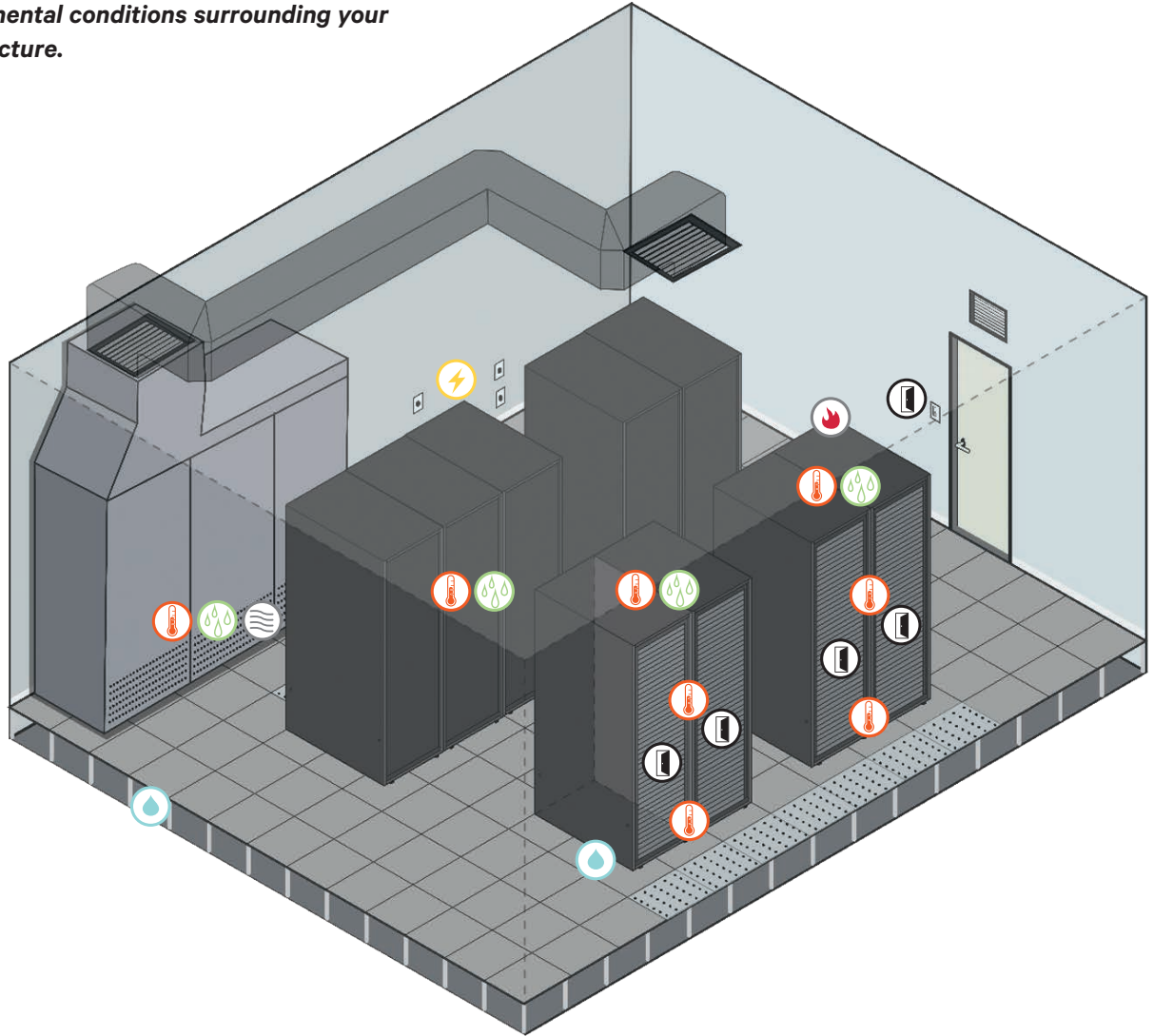
# Best Practices for Optimal Data Center Monitoring





Keep an eye on environmental conditions surrounding mission critical infrastructure.


**Keep an eye on environmental conditions surrounding your mission critical infrastructure.**


-  Temperature
-  Airflow
-  Power Failure
-  Smoke
-  Humidity/Dew Point
-  Door Position
-  Water Leaks




 **Temperature:** Temperature sensors should be placed on the top, middle and bottom of individual racks to measure the heat being generated by equipment, and at the air conditioning system's intake and discharge vents to measure efficiency. Sensors should also be placed around critical devices, because the temperature inside a rack-mounted device could be as much as 20 degrees higher than the surrounding area.

 **Power:** The best approach is to monitor current coming into the data center, and arrange for an orderly shutdown of IT equipment in case power is lost.

 **Smoke:** The best approach is to wire the smoke alarms directly into the climate monitoring and alerting system, essentially extending the functionality of the climate sensors to the smoke alarm.

 **Door position:** Dry-contact sensors that detect the opening and closing of a door should be installed at the room entry points and on the doors of server and UPS cabinets.

 **Water:** Water sensors should be placed at the lowest point (wherever water would tend to pool) on the floor, and underneath any pipe junctions. Air-conditioning condensation trays should also be equipped with sensors to detect overflow.

## Solutions that can help:

### Vertiv™ Geist™ Environmental Monitors

Securely observe conditions and receive alerts when user defined thresholds are breached.



#### Vertiv™ Geist™ Watchdog 15

Environmental Monitor, on-board temperature, humidity and dew point sensors, capacity to add 4 additional external sensors, US power supply included. View real time sensor data from a secure web interface and receive alerts via Email, SNMP, or Email-to-SMS. POE options available.



#### Vertiv™ Geist™ Watchdog 100

Environmental Monitor, on-board temperature, humidity and dew point sensors, one relay contact, capacity to add 8 external sensors (4 RJ12 and 4 Dry Contact/ 0-5V), US power supply included. View real time sensor data from a secure web interface and receive alerts via Email, SNMP, or Email-to-SMS. POE options available.

## Accessories

Add sensors to monitor critical equipment and conditions of the facility.



**Vertiv™ Geist™ Temperature, Humidity, Dew Point Sensor**



**Vertiv™ Geist™ Temperature, Humidity, Dew Point, Airflow Sensor**



**Vertiv™ Geist™ Temperature Sensor**



**Vertiv™ Geist™ Temperature x3, Humidity, Dew Point Sensor**



**Vertiv™ Geist™ Flood Sensor**



**Vertiv™ Geist™ Power Failure Sensor**