Application Note

# Frequently Faced Problems

Server room equipment like switches, routers, hubs, data storage devices, load balancers, vaults, racks and security systems need recommended temperature and humidity ranges to achieve both energy efficiency and equipment operating reliability. Prolonged high humidity exposure to server room equipment outside its recommended range can result in decreased reliability and durability and may lead to catastrophic equipment failure in extreme cases. High humidity is one of the major factors that can cause hardware failure and loss of valuable data in server rooms.

## Effects of Uncontrolled Humidity

The desired humidity level in the server room provides beneficial effects. However, it leads to several problems when humidity is high. High moisture in server room triggers several harmful effects such as:

- When there is a rapid temperature drop water condensates inside datacom equipment causes rust, short circuits, or deposits of dirt and minerals and corrode equipment.
- Moisture absorbing circuit boards expand and contract with changes in relative humidity levels
- Server room slowly starts damaging the electronic equipment and components resulting in permanent equipment failures.
- It may cause network failure.
- Humidity levels above 60% and elevated temperatures promote the growth of fungi.
- Fungus contaminates the air with dirt and spores, which clog a machine's airflow and promote heat retention and condensation.

### General Recommendation: RH to be Maintained

Maintain RH level between 35-45% for optimal performance & reliability at a temperature of 18 - 24 °C.

# **Bry-Air Solutions**

Bry-Air Dehumidifiers are the optimal alternative solution to the expensive datacom equipment used in server rooms. Dehumidifiers are used in server room along with air-conditioning units to remove the excess moisture from the air and bring down the Relative Humidity to the desired Level.

### Advantages of Bry-Air Dehumidifier in Server Rooms

- Compact & easy installation
- Independent humidity control & energy efficient
- Savings on the Close Control Unit (CCU)/Precision Units
- No condensation and fungi

## **Some of our Esteemed Customers**

Al Masaood Bergum, U.A.E (Mobile Server Room)	Broadridge Financial solution, Delhi
Sigma Steels, U.A.E	Uppal Chhada Hi-Tech Developers, Noida
ADNOC, Abudhabi, U.A.E	Hughes Communication, Gurugram
Belleli Energy SARL, U.A.E	Pfizer, Noida

SDG Software, Noida	Net Magic Mumbai
Trustline Software, Noida	Net magic Bangalore