InterpretAire: Precision Humidity Control for Highly Variable Cooling Load Applications

The climate conditions within a low load facility can affect results and the endurance of equipment and supplies. Efficiency of all types is essential to maintain profitability in the information age; whether it be hot gas reheat to reduce energy use when dehumidifying, SCR reheat to improve climate accuracy, or intelligent controls to keep the staff productive and sharp -- Data Aire has designed a solution to address these needs.

The Data Aire InterpretAire climate management system can be programmed to maintain constant temperature and humidity within these application-specific environments to ensure that results are accurate.

InterpretAire quite literally interprets the needs of the space, and maintains the unique temperature and humidity perimeters mandated for high-accuracy standards.

Maintaining a Stable Environment

Whether your emphasis is on pioneering technology, developing life-saving drugs or managing the integrity of sensitive documents or artifacts, maintaining the perfect environmental envelope is vital to your success.

These applications demand special equipment to manage the space.

- Require tight control over temperature and humidity
- Have large swings in cooling requirement daily & annually
- Must be dehumidified when little or no cooling is required
Temperature Control is Easy, Humidity Control is Not

Maintaining temperature when a facility has wide swings in heat load is relatively straightforward; the challenge is maintaining humidity. A standard air conditioning unit is not a viable solution because it has trouble interpreting humidity conditions and satisfying them in a room with variable cooling needs.

Consistency and precision were key drivers in the development of the InterpretAire solution. Likewise, these unique spaces require a solution designed to maintain the optimal conditions with programmable intelligent controls.

Features

**Hot Gas Reheat**
Reduced energy usage during dehumidification by 60%

**Supplemental Electric Reheat**
Operate in series with hot gas reheat when the load requires

**Electric Reheat Elements**
Designed to survive little or no air flow, as well as harsh conditions

**Silicon Controlled Rectifier (SCR)**
Allows the heat to pulse off and on in rapid succession to control the temperature within a narrower range than standard heat control option

**Discharge Air Control**
When cooling and heating is not needed, but dehumidification is, the temperature leaving the InterpretAire unit will be the same as the room temperature

**Intelligent Thermal Control Platform**
- Data Aire's dap4 control system is the industry's fastest and most advanced microprocessor controller available
- Our idap connects InterpretAire to the internet for monitoring and control, and email notifications of alarms, or
- Choose one of our additional communications cards to connect to essential building management systems