



# MODESTO DAIRY SOLUTIONS

## Environmental Data Helps Manage Milking Operations

"...We were very happy with the results and ease of install and integration." ~ *Bill DeWitt, Automation Engineer*



Dairy cows are subject to heat stress in warm climates. This causes not only discomfort, but also a decrease in milk production.

Modesto Dairy Solutions offers system design and equipment for milking, milk storage, and barn environment. Their custom, proprietary technology incorporates weather stations and temperature/humidity sensors to help manage production efficiency and cow comfort.

### Optimizing Productivity

Automation engineer Bill DeWitt says, "The weather stations/instruments have gone to multiple dairies in AZ and CA. We typically install one weather station per facility and control everything on that facility via that single weather station."

Modesto Dairy technology incorporates the Orion™ Weather Station with Weather MicroServer™ utilizing Modbus. Additionally Relative Humidity/Temperature Sensors with 4-20mA interface are incorporated into a PLC system.

To ensure optimum cow comfort and productivity, large fans and misters are placed strategically throughout the barn to effectively keep the cows cool.

"We use the weather station to control the fans and misting in the milking barn as well as in the corrals," DeWitt adds. "These fans and mist are used for cow comfort and need accurate ambient weather conditions to control them properly."



Ideal for high-precision weather monitoring, the Orion™ weather station features ultrasonic wind speed and direction, impact rain gauge, temperature, humidity, and barometric pressure, with the convenience of an all-in-one sensor module.



Modesto Dairy incorporates weather stations and temperature/humidity sensors from Columbia Weather in their proprietary technology for production efficiency and cow comfort.

"We use Temperature, Humidity, Wind Speed, Wind Direction and Wet Bulb for our cooling control. We also trend and record other weather data for the customer to see."

The technology improves efficiency for both the cows and employees. Now during the hot summer months, the cows are always comfortable and cool, which enables them to keep their production and breeding levels up.

#### Happy with the Results

"The reason we first went with the CWS weather station was we were looking for an accurate, repeatable and durable all-in-one weather station that was also budget friendly. After researching CWS as well as other manufacturers, we determined that the CWS weather station would be the one we would like to try. After the first install, we were very happy with the results and ease of install and integration."



Relative Humidity/Temperature Sensor offers two 4-20mA outputs, and combines easy installation and minimal maintenance with accurate, reliable measurement.

Call or email to find out how Columbia Weather Systems can help make weather monitoring easy for you:

1888 508-7375 / [info@columbiaweather.com](mailto:info@columbiaweather.com)

#### For more information

**Modesto Dairy Solutions:** [www.modestodairysolutions.com](http://www.modestodairysolutions.com)

**Orion Weather Stations:** <https://columbiaweather.com/products/weather-stations/fixed-base/orion-weather-station>

**Relative Humidity/Temperature Sensors:** <https://columbiaweather.com/products/weather-stations/analog-interface/humidity-temp>