Wet and Dry Bulb Humidity Measurement and Control.

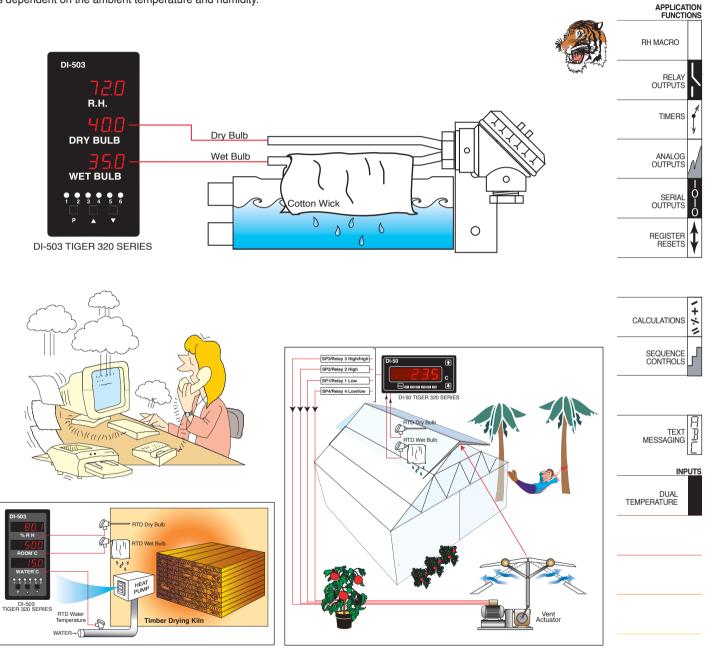
**Humidity Measurement and Control** 

Wet and dry bulb humidity measurement, using two temperature sensor probes, is perhaps the most reliable method of accurately calculating humidity for low temperature applications in industry today. Both sensors are mounted close together, with one designated the dry bulb sensor and the other the wet bulb sensor. The wet bulb is kept wet using a moistened cotton wick.

The wet bulb is cooled relative to the dry bulb by heat loss due to moisture evaporation from the wet bulb wick. The rate of evaporation is dependent on the ambient temperature and humidity.

From a polynomial formula entered into the controller, relative humidity (RH) is calculated from the dry and wet bulb temperatures.

A Tiger 320 Series controller, with a dual RTD or thermocouple input module and our relative humidity smart app installed, allows you to directly display RH and temperature. This data can be used to control the temperature and humidity applications in horticulture, livestock, food processing, environmental, timber drying, and many other industries.



## Suggested Ordering Code Options for This Application

Basic Order Codes	Comments	I
DI-50T-DR-PS1-IDT2	Humidity custom smart app. Display only one selectable parameter.	
DI-503T-DR-PS1-IDT2	Humidity custom smart app. Display all parameters.	TEMPERATURE T/C, RTD
Note: Custom Smart App required. Charges vary depending on application. Contact Texmate.		