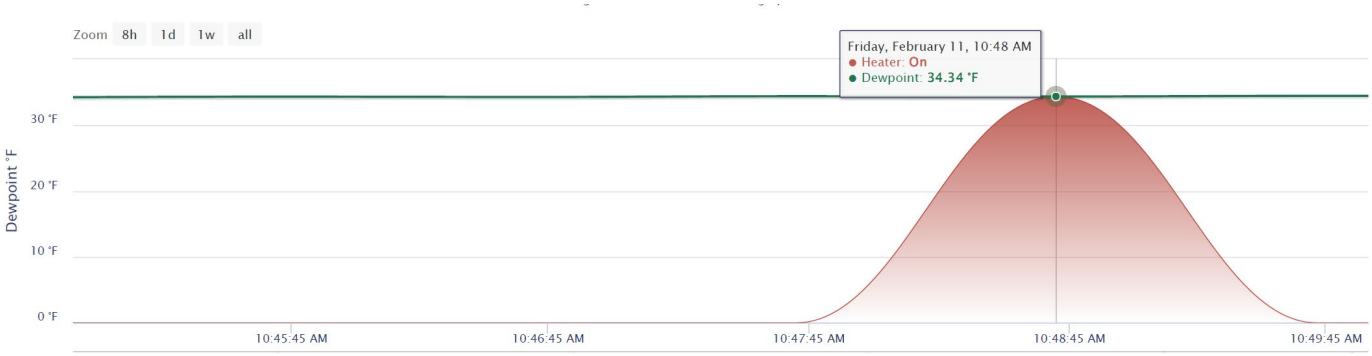
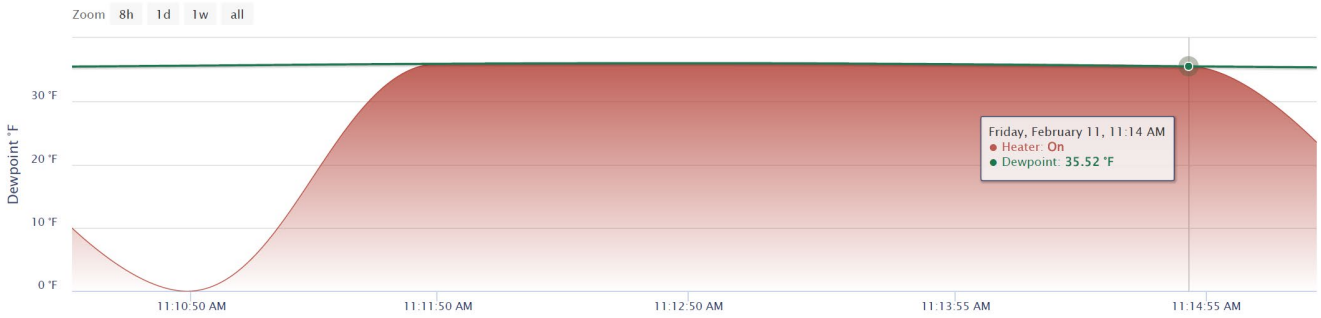
The ArtikControl™ ACHC (Anti-Condensation Heater Controller) uses state of the art technology to control the Reach-in Cabinet Door Heaters to prevent excessive energy usage. The ArtikControl™ ACHC utilizes a Temperature/Relative Humidity Sensor to calculate the Dew Point in the Store's environment. The ArtikControl™ ACHC has (4) four Channels that can be utilized to control the Reach-in Cabinet Door Heaters. Each Channel sends a DC voltage out to a 30-amp relay that operates the Door heaters based upon its parameters. Cabinets can be combined if the total door amperage doesn't exceed the 30-amp relay draw.

The ACHC has adjustable parameters for the activation range for the Door heaters. The ACHC allows for the following input information, Low Limit, High Limit, and Scan Period. The low limit is the minimum Dew Point value that the heaters will turn ON whereas the High Limit is the value at which the heaters will be ON all the time and any Dew Point reading above the High Limit will cause the heaters to remain ON all the time. The Scan Period is the time frame in which the Dew Point information is pooled, this time is also utilized to calculate the percentage of heater ON time based upon the Dew Point reading. If the Dew Point reading is equal to the Low limit the heaters will be ON for 1% of the Scan Period whereas if the Dew Point reading is equal to the High Limit the heaters will be on 100% of the Scan Period. If the Dew Point stays below the Lower Limit for 24-hours the system will turn on for 1 Scan Period to make sure Condensation has not formed on the Doors. Once the Heaters are turned OFF the 24-hour cycle starts again.

Example:



Dew Point parameters set Low Limit – 30.00°F and High Limit – 50.00°F with a 5-minute scan period so the Heater is ON for roughly 2% of the 5-Minute Period since the reading is 34.34°F



Dew Point parameters set Low Limit – 20.00°F and High Limit – 40.00°F with a 5-minute scan period so the Heater is ON for roughly 78% of the 5-Minute Period since the reading is 35.52°F