



UDC 3500 Application Note

ON/OFF CONTROL

An “ON/OFF” controller has a switching **Hysteresis** that is used to define switching thresholds where the unit will change its output status.

- Decreasing the **Hysteresis** will cause the output relay to turn on and off more frequently (faster cycling) and hold the temperature closer to the set point.
- Increasing the **Hysteresis** will cause the output relay to turn on and off less frequently (slower cycling) and increase the temperature cycling above and below the set point.

In the UDC 3500 adjusting the “OUT HYST” value in the “Control Group” sets the Hysteresis. This value is set in percent of the Input 1 span

Example

Input 1= J thermocouple Middle (J T/C M), IN1 HI =900°, IN1 LO = 20°,
Input 1 Span = 900°-20° = 880°

Set point = 500°

Hysteresis = 1.0% = .01 x 880 = 8.8°

