

# RTI PRODUCTS

## Satellite Antenna De-icing Systems for DH Antennas, Challenger Antennas, Patriot Antennas

---



**Automatic De-icing System for Protection against Snow and Ice**

**Simple to Field Install and Operate**

**Engineered for Customer Specified Voltages**

**Low Energy Costs**

**User selectable Automatic, Off or Manual On Modes**

**Available for Skyware Global Antennas**

### DESCRIPTION

The RTI Products De-icing system consists of a factory pre-wired control unit, heater pads for reflector coverage, and a feedhorn heater. All systems are engineered to be easily assembled, installed and operated.

The control unit has three modes of operation: Automatic, Manual Off and Manual On. The Automatic mode allows the control to monitor the ambient temperature and sense the presence of moisture. An ambient temperature of less than 40 degrees F and the presence of moisture activate a heater contactor. The heater contactor is rated up to 50 amps. The heaters will remain on for a factory preset time of one hour longer than conditions warrant. The Manual Off mode turns the heaters off, regardless of the weather conditions. The Manual On mode turns the heaters on, regardless of the weather conditions. Control units are factory preset to operate on 120 to 240 volts, single or three phase power. All cabling to attach the heater pads is factory pre-wired. The larger systems have a control unit with remote moisture sensor.

The heater pads consist of heater wire sandwiched between layers of aluminum foil. Heater pads allow for a faster install without the need for templates. The aluminum foil is coated with an aggressive acrylic adhesive and a peel and stick liner. Watt density of the heater pads, depending on the reflector, is between 40 and 55 watts per square foot. The aggressive acrylic adhesive adheres to a variety of substrates and will not release when pad temperature increases. Heater pads have water resistant connectors that plug into the cables from the control unit.

The feedhorn heaters consist of heater wire attached to a strap and covered with heatshrink. They are attached to a rib on the feedhorn.

Installation of the de-ice system consists of applying the heater pads to the backside of the reflector, mounting the control unit / moisture sensor, routing power to the control unit, attaching the feedhorn heater, and connecting the heater pads to the control cables.

The De-icing systems can be custom made for a variety of antennas and applications.