

# Lightning & Surge Protection Equipment



**Lightning is a major threat to remote Data Collection Systems - not only in rare direct strikes, but also nearby strikes radiating energy to the station.**

Sutron equipment has built-in surge protection. Nonetheless, external lightning protection is recommended.

## Lightning Protection Kit for Stations

### 5100-0600-1

- ▶ STATION KIT with a ground rod (5/8 in. OD by 8ft), copper wire (#4 solid), clamp, single point ground plate.
- ▶ Select one or more telemetry protectors from the following

## Lightning Protection Kit for Towers

### 5100-0600-2

- ▶ TOWER KIT, with an aluminum point (36" in.long),
- ▶ 3 ground rods, copper wire (#4 solid) & clamps

## Coaxial Protector

### 8111-1099-1

- ▶ For LOS or GOES telemetry, includes 3 ft. cable
- ▶ Used with radio transmitters (A high mounted tower antenna attracts lightning strikes.)
- ▶ Attached to coaxial cable to protect equipment from strike or wind blown static build-up
- ▶ Bulkhead mountable or mounted on single point ground plate inside gauging house or enclosure
- ▶ Not weatherproof
- ▶ Type N connectors
- ▶ No DC continuity, 600VDC turn on 2.5 nS turn on time
- ▶ VSWR <1.1 to 1 Insertion loss <0.1dB
- ▶ 50-700 MHz

## Telephone Line Protector

### 1311-1058

- ▶ Internal or external telephone modems
- ▶ Stops lightning strike surges before they reach the field station equipment.
- ▶ Used at each telephone station even when phone company has provided protection
- ▶ Telephone Line Multi-strike, 2 stage hybrid protector
- ▶ PROTECTOR: 200 V turn on, < 1nS turn on time, handles ringing & DC voltages, Aluminum enclosure with mounting hardware



## AC Protector

### 1311-1059

- ▶ Used with AC powered equipment
- ▶ Self resetting
- ▶ Automatic 3 stage operation, MOV and Gas Tube Arrestor, self restoring, UL Listed

## Lightning Rod

- ▶ Directs the lightning strike away from sensitive equipment
- ▶ Included in Sutron lightning protection kits Metal Conduit
- ▶ Reduces the amount of energy wires pick up from nearby lightning strikes (can be purchased locally)
- ▶ Install conduit on any wires outside of the enclosure

## Metal Conduit

- ▶ Reduces the amount of energy wires pick up from nearby lightning strikes (can be purchased locally)
- ▶ Install conduit on any wires outside of the enclosure