

# LIGHTNING PROTECTION



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 suggested.

## LIGHTNING PROTECTION KIT STATION - 5100-0600-1

- STATION 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 5100-0600-2 - TOWER

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



## GAS TUBES 1311-1060

- Provide additional protection to MOV and/or other protection installed in equipment
- 3-electrode maximum duty gas tube, 300-500 VDC Breakdown Voltage, 40kA maximum surge, 1000A, 10/1000  $\mu$ s waveform impulse life, UL listed, REA accepted
- Provide extra protection to data line, radio, or telephone line inputs; consult factory for application assistance

## AC PROTECTOR 1311-1059

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

## 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 <0.1 dB
- 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

## 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