

# PRAGATI ELECTROCOM



# **CHARGE TRANSFER SYSTEM**



Accelerate your business potential with innovations from PRAGATI ELECTROCOM



The traditional Franklin rod system may no longer offer adequate protection to today's nano-speed microcontrollers. We require more than just managing the lightning strike by directing it to earth. It is now imperative to mitigate the chances of a direct lightning strike to critical facilities. Lightning dissipation technique is an answer to this

Charge dissipation technology has been successfully applied to the lightning protection industry by developing a product that can be mounted on structures to reduce the accumulation of ground charge. This is accomplished by ionizing surrounding air and neutralizing accumulated charges on the earth's surface, including the grounding system.

When a pointed, grounded conductor is placed in a high electric field voltage effects at the point are increased greatly. Electrons from atmospheric atoms and molecules are stripped away and flow to ground through the grounded conductor, leaving behind positive atmospheric ions around the point. This process is commonly referred to as the "corona" effect.

This corona process begins long before charge accumulation reaches a critical level when step leaders begin forming in a storm cloud. The result is an accumulation of ions around the point. Since like charges repel from each other, this accumulation of ions disperse in all directions away from the point. Electrons left behind from this dissipation of ions flow to ground and neutralize the positive charges accumulated on the ground and on the structure. This is an ongoing process as the thunderstorm builds and passes over a facility.

Pragati Electrocom's Charge Transfer System (CTS) is the latest design in lightning dissipation technology. Scientifically & Practically it is proved that Charge Transfer System, and the structures on which they are installed, are much less likely to sustain a direct lightning strike than unprotected structures or structures protected with traditional Franklin Rod when installed as per recommended practice of UL 96 A. Thus, in the exceptional event of a lightning strike terminating on CTS, the system meets or exceeds the protection provided by a traditional air terminal.

With CTS, we can offer a customized solution for each application to achieve total lightning protection for the specified area/ volume.

## **CHARGE TRANSFER SYSTEM**

#### Features:

- · High grade stainless steel construction
- · Lightweight and easy to install
- · Corrosion resistant
- Independently tested at Central Power Research Institute, Bangalore, India



### Applications:

Multiple use of CTS makes it suitable to use for standard Risk Protection of:



Buildings



**Industrial Facility** 



**Shelters** 



Homes



Warehouses



Monopoles



High Mast Lighting



Externally Mounted Cameras



**Bridges** 



Petrochemical Storage Facility

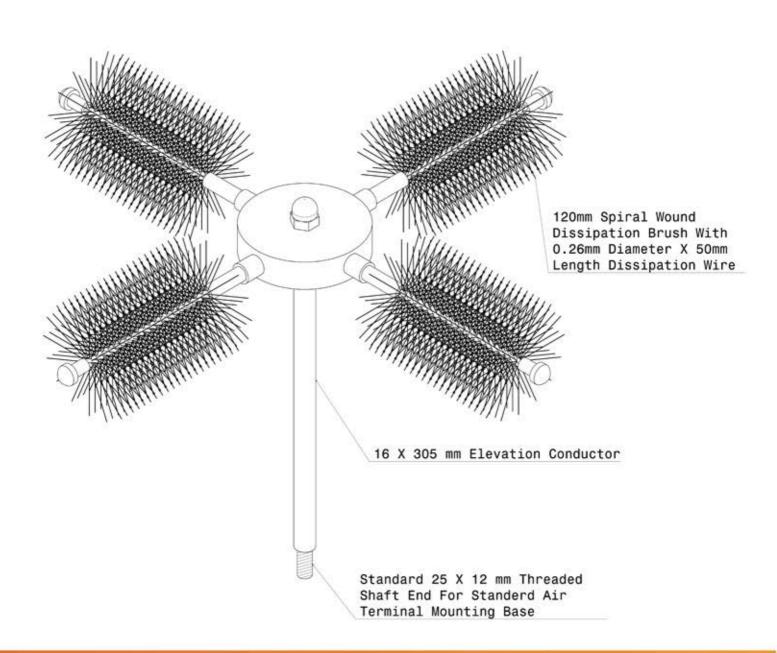


Communication Towers

## **CHARGE TRANSFER SYSTEM**

CTS provides a higher level of charge dissipation. It is constructed of Stainless Steel and utilizes four stainless steel dissipation brushes attached to a single elevation conductor for higher dissipation on a single mount. The CTS is ideally suited for protecting high mast light poles, security cameras, SCADA antenna systems, and smaller monopoles and towers used for communications.

- 120 mm Spiral Wound Dissipation Brush with .26 mm Diameter X 50 mm Length Dissipation Wire
- All elevation conductors are 16 mm diameter. Elevation conductors are available in various lengths.
- Standard 25 X 12 mm Threaded Shaft End For Standard Air Terminal Mounting Base





#### Pragati's Pride



#### INNOVATIVE THINKING

Great Minds at Work. At Pragati Electrocom
the emphasis is given on Innovations, quality
and delievery on time.

Pragati Electrocom has been the Pioneer in
the fields of innovation as we have analysed
the practicalities and have modified our
products to suit various environment.



Product / System Certificates: UL, CPRI, NABL, ISO 9001; ISO 14001; OHSAS 18001 Approvals: RDSO, MES, Reliance Telecom, Indus Towers, State Electricity Board







Put our services to the test, contact us for a free consultation today.



H.Q: Plot No. 184/3, Phase-1 IMT Manesar, Gurgaon -122050, Haryana, India. Ph: +91-124-2291480, Fax: +91-124-2291479