

## THE TOWER KIT Lightning Protection for Communication Towers

In today's fast paced environment where a vast majority rely on wireless and satellite communications for everything from phones, to computers, to broadcast media towers, reliability has become imperative. Microwave and cell towers are the lifeline for businesses, governments and people all over the world. When one goes down the effects are far reaching and the impact can be costly and inconvenient to many.

Lightning Eliminators has been protecting communication towers around the world for over 43 years and has witnessed first-hand the advancements and changes that have occurred due to innovation. With this in mind, LEC has created a solution which makes it easy to implement a complete lightning protection system specifically designed with a tower's safety and operations in mind.

- A hybrid lightning protection package that offers a robust and cost-effective solution for communication towers
- Provides a total Lightning Protection System (LPS) which includes direct strike protection, surge protection and grounding

## Why is this solution more efficient?

• Reduces the risk of a direct strike by lowering the electric field to below lightning-collection levels within the protected area.



## Packages available for both 3-face and 4-face towers including heights of:

Tower Height	3-Faced Tower	4-Faced Tower
0-150 FEET (0-45 METERS)	3 SBIs*   2 Chem-Rods   TLX 100	4 SBIs   2 Chem-Rods   TLX 100
151-300 FEET (46-90 METERS)	6 SBIs*   2 Chem-Rods   TLX 100	8 SBIs   2 Chem-Rods   TLX 100
300-450 FEET (91-135 METERS)	9 SBIs*   2 Chem-Rods   TLX 100	12 SBIs   2 Chem-Rods   TLX 100
451-600 FEET (136-180 METERS)	12 SBIs*   2 Chem-Rods   TLX 100	16 SBIs   2 Chem-Rods   TLX 100

\*Minimum number of SBIs based on tower height

Customized Solutions and additional surge suppression and grounding options available upon request



- Safely collects any strikes it cannot prevent from virtually any direction, creating a larger area of protection.
- Designed specifically for structures that require lightweight protection with a low wind profile.
- Reduces the risk of the secondary effects of lightning on operational equipment and sensitive electronics.
- All products are UL listed and meet standard requirements.

## What are the benefits?

- Easy to install and cost-efficient.
- Increases safety in the work environment
- Reduces maintenance costs and frees up resources.
- Prevents damage and protects valuable equipment and electronics.
- Enables the delivery of uninterrupted product to the marketplace.
- Avoids downtime and outages.
- Increases ROI.

Spline Ball Ionizers<sup>®</sup> (SBI<sup>®</sup>) - The patented SBI is a hybrid lightning protection concept engineered to provide multiple layers of protection for critical applications.

In its primary mode, the SBI lowers the risk of direct strikes by utilizing a phenomenon known as charge transfer, where a well-grounded point exchanges ions between the air and earth. This ionizing capability helps keep the local electric field below lightning potential, making the protected site less likely to experience direct strikes.

Chem-Rod<sup>®</sup> - The patented Chem-Rod creates the optimal earth connection with a large conductive surface, electrolytic salts, and specially formulated backfill. Available in a variety of configurations, Chem-Rods help achieve your target resistance using fewer electrodes and less real estate.

**C TLX 100** - A nipple-mounted surge protector for light load service entrances and subpanels. The TLX 100 has 100,000 amps of protection in all modes including L-N, L-G, L-L and N-G. It is a versatile Type 1 SPD which provides a wide variety of voltages and configurations for any application and can be installed upstream or downstream of main disconnect.

