

Evolutionary Invention That Puts an End to Lightning Accidents

We have advanced lightning-avoidance technology to the edge of what is physically achievable. Rather than attempting to prevent lightning strikes outright, this device reduces the probability of a strike occurring at its installation site. It is protected by a United States patent—fittingly, in the country where Benjamin Franklin first conceived the lightning rod.

Far from being a simple sphere, the device features a dual-layer configuration. The lower electrode is embedded within an outer shell that serves as the upper electrode, following the principles of a conventional PDCE. This integrated architecture enhances performance by suppressing the onset of electrical discharge, even under intense electric-field conditions.

It's called the Anti Lightning Ball®

We have trademarked the English name:
“ALB (Anti Lightning Ball)”.

Patented in Japan and the USA

	Diameter	Height	Weight	Material
Large	200 mm	390 mm	5.5 kg	SUS316L
Small	120 mm	235 mm	2.2 kg	SUS316L



Lightning Suppression Systems

株式会社 落雷抑制システムズ

<https://www.rakurai-yokusei.jp/>



The Final Form of Lightning Protection Systems

Prevents lightning accidents by not inviting lightning strikes

The device suppresses the generation of upward streamers from the ground.

Older lightning protection systems

Actively invites lightning strikes via upward streamers

▼
The invited lightning currents run along the rain-soaked ground, causing damage

Anti Lightning Ball

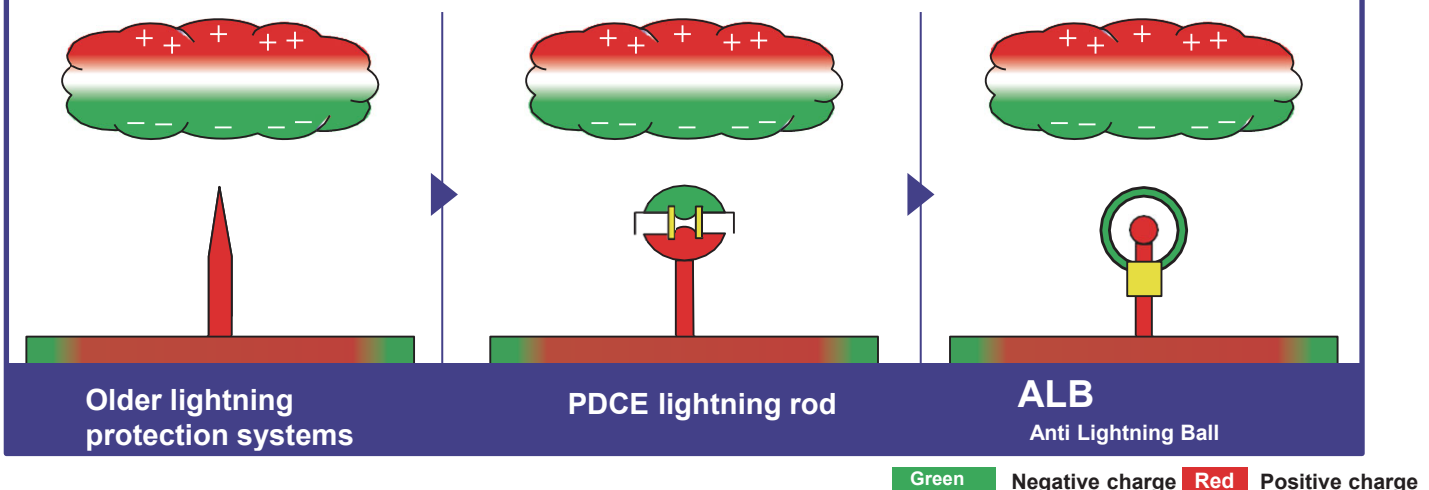
Two-layer solid capacitor makes it difficult for upward streamers to form

▼
Avoids inviting lightning strikes as much as possible so there's no damage caused by lightning currents

Q. If lightning doesn't strike, where does it go?

A. Discharge in the air (within and between clouds) accounts for 80%. The remaining 20% strikes the earth as lightning.

Structural evolution towards increasing discharge voltage, culminating in the Anti Lightning Ball



Proven performance in discharge voltage testing under the French NF C17 standard
Patented in both Japan and the USA



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落雷抑制システムズ

[Head Office]

44th floor 4406, Yokohama Landmark Tower,
2-2-1 Minatomirai, Nishi Ward, Yokohama City

Phone: +81-45-264-4110

Mail: info@rakurai-yokusei.jp