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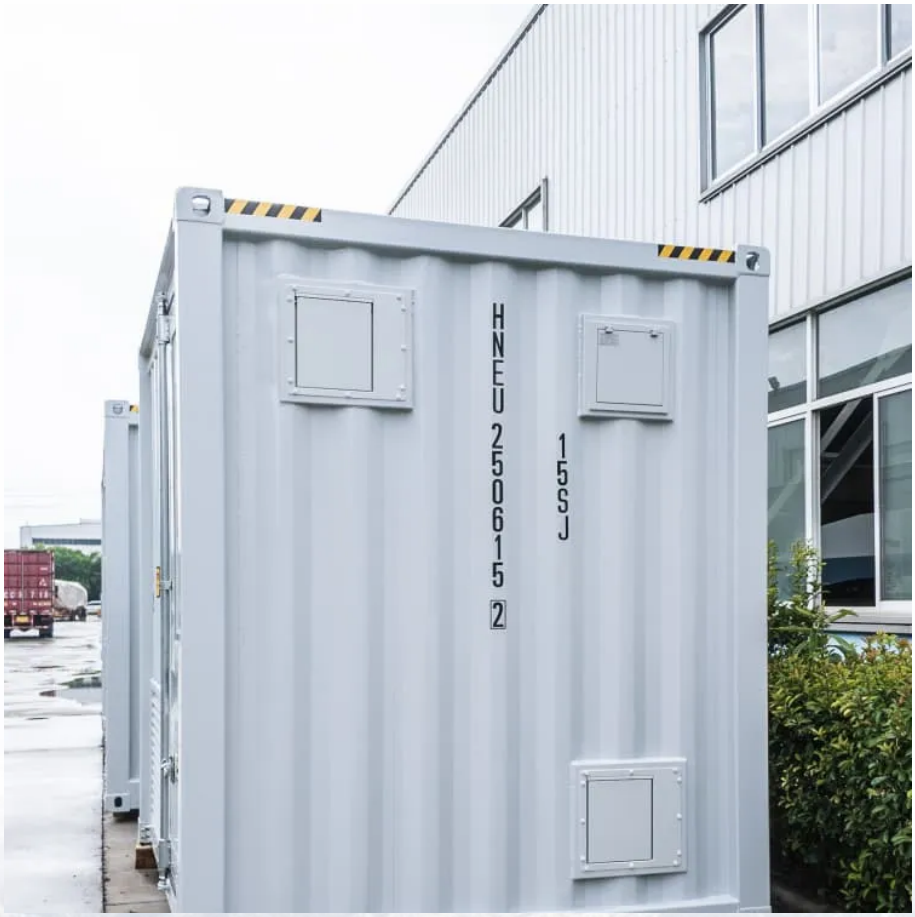
Lightning protection for communication buildings and mobile base stations



Overview

Does a lightning arrester protect a telecommunication station?

Lightning protection (strikes with indirect effects) for telecommunication stations by lightning arresters, is applicable for all electrical networks. It is also compulsory to provide protection against lightning strikes with direct effects by placing a lightning arrester (near the top of the.

What is the best lightning and surge protection for telecommunication facilities?

When lightning strikes, relying solely on air terminals proves insufficient in effectively safeguarding telecommunication facilities. The best lightning and surge protection for telecom involves a synergistic combination of key components such as tower lightning rods, tower lightning arresters, and grounding systems.

Who needs lightning protection?

or a large private subscriber / consumer (tertiary industry, others). Lightning protection (strikes with indirect effects) for telecommunication stations by lightning arresters, is applicable for all electrical networks.

Why are lightning and surge protection important for telecommunication networks?

In conclusion, systematic lightning and surge protection are imperative for the resilience and longevity of telecommunication networks. When lightning strikes, relying solely on air terminals proves insufficient in effectively safeguarding telecommunication facilities.

Is a telecommunication tower impacted by lightning?

If the antenna is installed on the top of telecommunication tower, e.g., antenna positions 1 of Figure 29, it is considered to be impacted by or exposed to direct lightning strikes. Refer to [IEC 62305-3] for detail

information about the protection angles and volume protected by an air termination system.

How should a lightning protection System (RBS) be formed?

The earthing network of an RBS should be formed by a ring loop surrounding the tower, equipment room and fence, at a minimum. The mean radius re of this ring loop should be not less than l1, as indicated in Figure 1 and this value depends on the lightning protection system (LPS) class and on the soil resistivity.

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