

BLTZ

LIGHTNING SPECIALIST

BLZ-800



The Early Steamer Emission Principle

The principle of operation for ESE terminals is to create an upward propagating streamer earlier than conventional air terminals or other objects on the earth. **BLITZ ESE Terminal** does this by collecting and storing ground charge during the initial phase of a thunderstorm development.

Once a thunderstorm begins creating downward step leaders, the ambient electric field intensity in the area of the ESE terminal increases. When this electric field intensity reaches a preset level, it triggers the terminal to release the stored ground charge, forming an upward streamer microseconds earlier than other objects in the immediate area.



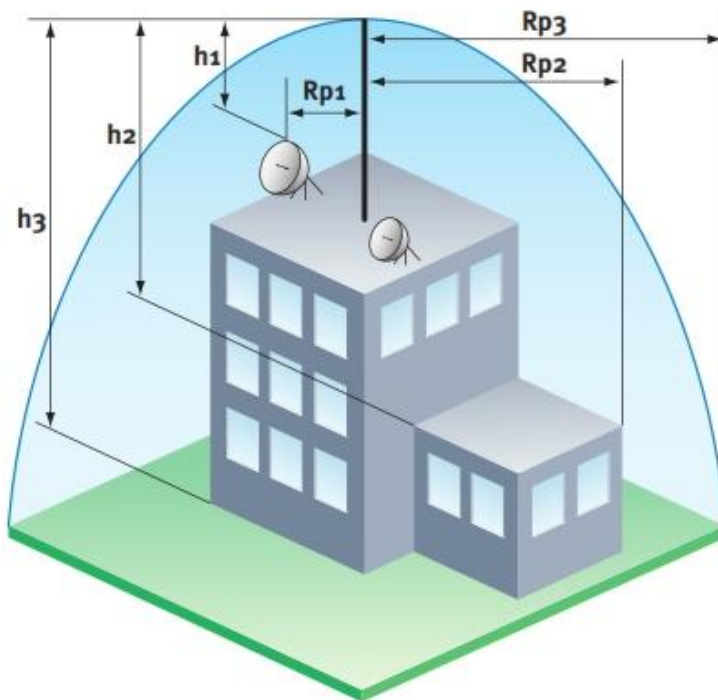
The Mechanism of BLITZ ESE Terminal

The ionisation device is charged via the lower Electrodes using the ambient electrical field. This means **The BLITZ ESE Terminal** is fully autonomous system requiring no external power supply.

The ionization phenomenon is controlled by device which detects appearance of downward leader : the local electrical field increase rapidly when a discharge is imminent.

Early triggering of the upward leader using a system of spark ionization between the upper electrodes and central tip. **The Blitz ESE Terminal** ability to trigger an upward leader ahead of any other protruding point within the protected area ensures it will be the preferential point of impact for the lightning discharge

Radius Of Protection

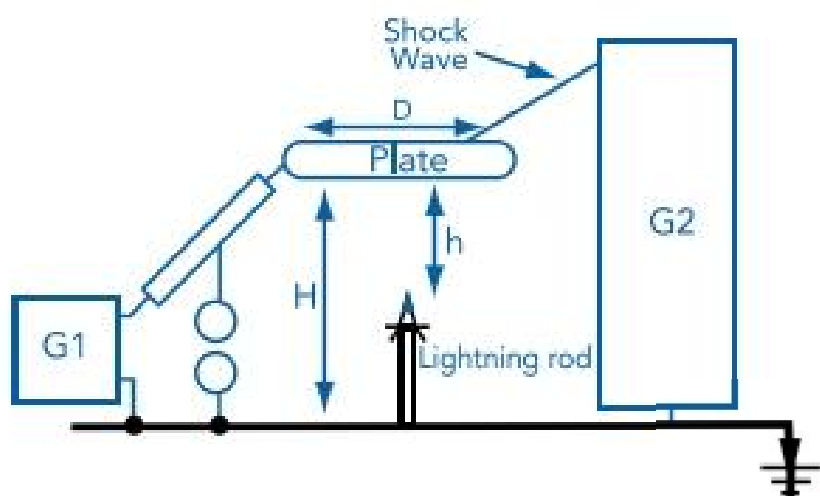


The Protection Area R_p of BLZ ESE lightning conductor is calculated according to France Standard NFC 17-102 :

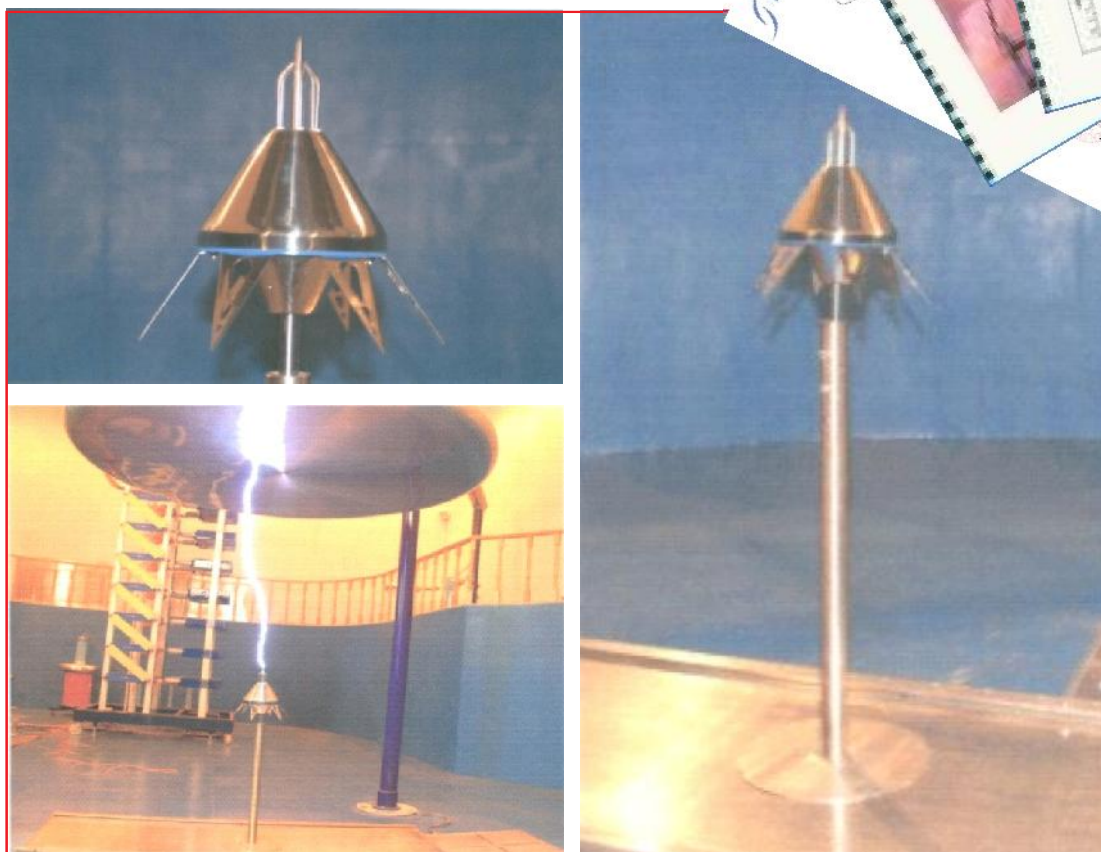
$$R_p = \sqrt{h}(2D - h) + \Delta L(2D + \Delta L)$$



LABORATORY TEST MODEL



PAPER RESULT



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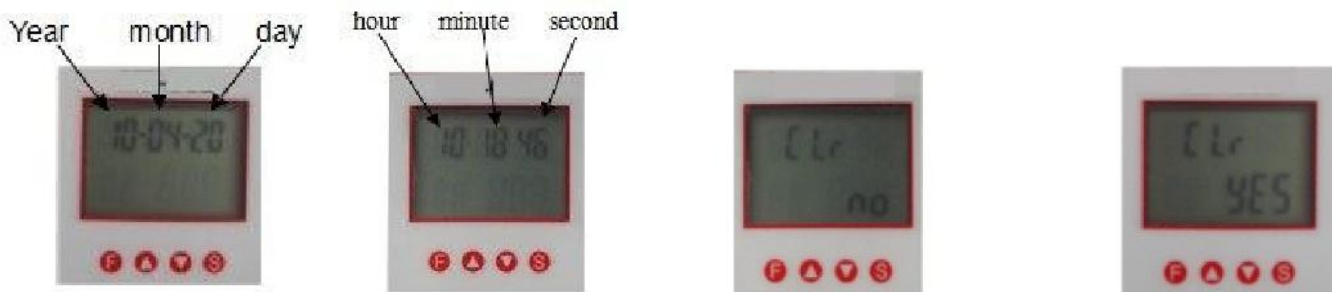
Lightning Strike Counter BZ-2

BZ-2 is a digital counter which can be used to calculate the number of lightning strikes on the external lightning rod. Counter is equipped with the ability to display the date and time of occurrence of lightning in the air terminal, thus making the BZ-2 to counter the most sophisticated among other counter. With low power consumption, battery consumption becomes more durable.



Features :

1. Accumulation Lightning Counting Available, Lightning Record of date, time, Lightning Record of date, time, total 80 Lightning Record
2. Date & Time can be set up and lightning record could be cleared
3. Big Character display of date, time, and lightning counting number
4. Electrical Counting, no machinery wear, long life performance
5. LCD automatic turn off for electricity-saving
6. High power capacity Battery, 8 Years long working life without replacing battery



Technical Specification :

Power Supply	9V Battery changeable
Display Digit	0 ~ 999
Min. Count Impuls	>3kA (8/20μs)
Date & Time Display	Available Once Striken
Installation width	2 standard modular
Installation	35mm Standard Rail (EN50022 / DIN46277-3)
Enclosure	Thermoplastic UL94-V-0

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BLZ-100C25

Uc	: 275/385 V
Up	: ≤ 3 kV
Iimp	: 25 kA (10/350μs)
Iimp	: 100 kA (8/20μs)
Imaks	: 120 kA (8/20μs)
TRes	: ≤ 25 ns
Enclosure Material	: UL94-V0
Connection Type	: Parallel



BLZ-100/3

Uc	: 275/385 V
Up	: ≤ 3 kV
Iimp	: 100 kA (8/20μs)
Imaks	: 150 kA (8/20μs)
TRes	: ≤ 25 ns
Enclosure Material	: UL94-V0
Connection Type	: Parallel



BLZ- 40/3

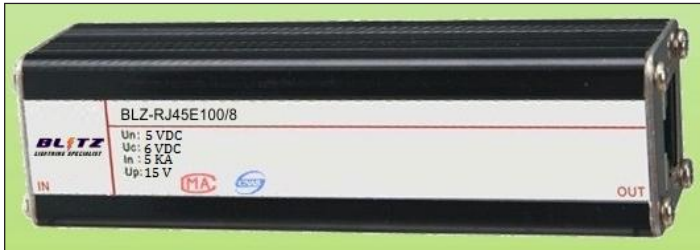
Uc	: 275/385 V
Up	: ≤ 1,2 kV
Iimp	: 20 kA (8/20μs)
Imaks	: 40 kA (8/20μs)
TRes	: ≤ 25 ns
Enclosure Material	: PBT (Polycarbonate)
Connection Type	: Parallel



BLZ- SK6

Uc	: 220/275 V
Up	: ≤ 1 kV
Iimp	: 10 kA (8/20μs)
Imaks	:
Connection Type	: Series

Data Surge Arrester :



BLZ-RJ45E100/8

Uc	: 5/6 Vdc
Up	: ≤ 13 V
Iimp	: 2,5 kA (8/20μs)
TRes	: < 1 ns
Connection Type	: Series



BLZ-24RJ45E100/8

Uc	: 5/6 Vdc
Up	: ≤ 13 V
Iimp	: 2,5 kA (8/20μs)
TRes	: < 1 ns
Connection Type	: Series

Signal Surge Arrester :

