雷易
REAZY

先驱者LY-ESE 3.0
提前放电避雷针

Early Streamer Emission Air Te
rminal Pioneer LY-ESE 3.0

广州市雷斯盾电气科技发展有限公司
Guangzhou Leisidun Electrical Technology Development Co.,Ltd

A COMPANY PROFILE 公司简介

Guangzhou Leisdun Electrical Technology Development Co., Ltd., established in 2010, is a high-tech enterprise specializing in the resea rch and production of lightning protection products with innovative technol ogical capabilities and strong market influence in the industry. Its registered trad emark is "REAZY".

The multiple innovative products developed and produced by the company have been tested and certified by authoritative national institutions, possessing strong market co mpetitiveness and sustainable development capabilities.

The company has a strong technical team and a comprehensive after-sales service sys tem, providing customers with a series of lightning protection and grounding overall s olutions and all-round after-sales service content at any time.

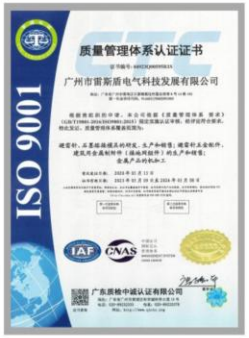
B 先驱者LY-ESE 3.0 提前放电避雷针

Early Streamer Emission Air Terminal Pioneer LY-ESE 3.0

Product Introduction

PIONEER PLUS LY-ESE3.0 Early Streamer Emission Air Terminal is the 2nd generation of early discharge lightning rod launched by Guangzhou Lei sdun Electric Technology Development Co., Ltd. after five years of resear ch and testing.

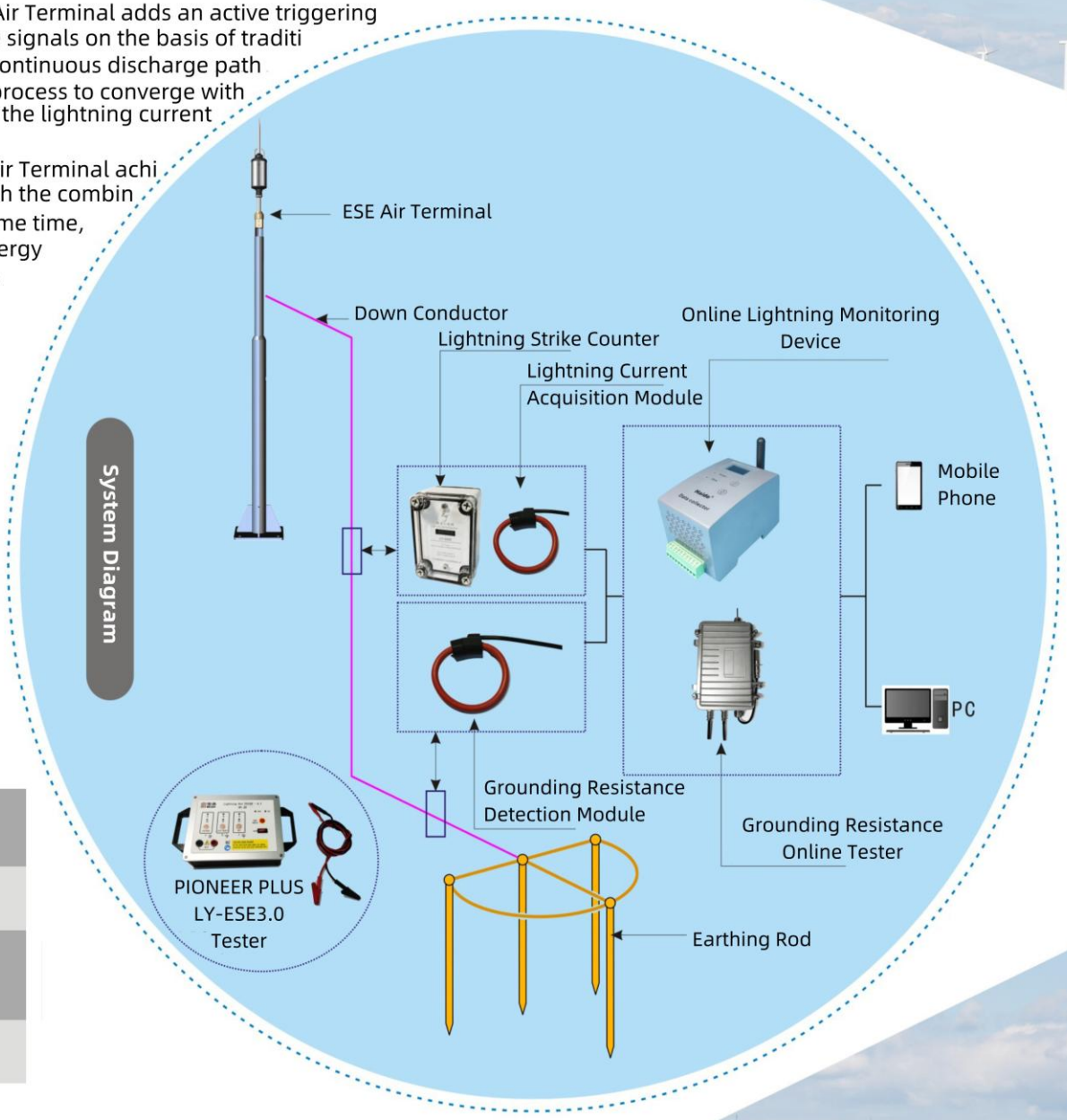
The PIONEER PLUS LY-ESE3.0 Early Streamer Emission Air Terminal has un dergone qualified testing by domestic authoritative testing centers and ob tained certification from multiple international authoritative certification organizations.



Working Technology Principle

The PIONEER PLUS LY-ESE3.0 Early Streamer Emission Air Terminal adds an active triggering system that can establish repetitive high-voltage pulse signals on the basis of traditi onal lightning rods. Through the triggering system, a continuous discharge path is generated in a timely manner during the discharge process to converge with the downward leader of the thundercloud, introducing the lightning current into the ground.

The PIONEER PLUS LY-ESE3.0 Early Streamer Emission Air Terminal achi eves the above technical principle requirements through the combin ation of a pulse transformer and an oscillator. At the same time, with strictly controlled frequency and amplitude, the energy from the static electric field and electromagnetic field is converted into high-voltage signals and sent to the nee dle tip, generating a large amount of electric ions. This function allows the upward leader emitted by it to adv ance to a distance of tens or even hundreds of meters from the lightning rod and connect with the downward leader from the thunderstorm, thereby expanding the protection range of the lightning rod.



Product Technical Features

- Superior performance, high lightning arresting accuracy, larger protection range, and lower lightning current wave head steepness.
- Maintenance free, no need for power supply, safe and reliable, strong wind resistance.
- Combined with the lightning online monitoring system, lightning protection is elevated to a new technological field of technology IoT and intelligent efficiency.
- Reliable connection, stable performance, in compliance with new international standards.

Advance Discharge Time & Protection Range (Rp)

The PIONEER PLUS LY-ESE3.0 Early Streamer Emission Air Terminal has passed all standard tests, and the product's early discharge time is:

$$\triangle T=60\ \mu s$$

According to the French standard NFC17-102:2011,

When h ≥ 5m,

$$Rp\ (h)=\sqrt{2rh-h^2+\Delta(2r+\Delta)}$$

When 2 ≤ h ≤ 5m,

$$Rp=h \times Rp\ (5)\ /\ 5$$

Rp: the protection radius on the considered horizontal plane,

h (m): For the PIONEER PLUS LY-ESE 3.0, the needle tip is horizontal relative to the top of the protected object

Height difference, i.e. effective installation height

r (m): 20m, 30m, 45m, 60m calculated based on usage risk analysis (NFC17-102: 2011 Appendix A) Assessment of Site Protection Levels I, II, III, or IV

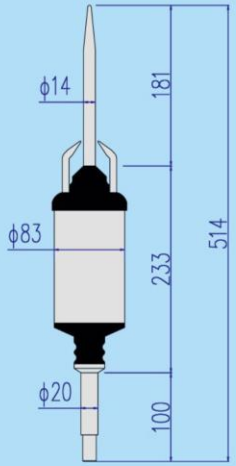
△ is the upstream preemptive distance: △ L=V (meters/microseconds) X △ T (microseconds), number of experiments

It is indicated that it is equivalent to the efficiency obtained during the ESEAT evaluation test.

PIONEER PLUS LY-ESE Eealy Streamer Emission Air Terminal Protection Radius Table (Rp)

Model	Installation effective height h (m)										
	2	3	4	5	6	8	10	15	20	25	30
Level Ⅰ (r=20m)											
ESE3.0	32	47	63	79	79	79	79	80	80	80	79
Level Ⅱ (r=30m)											
ESE3.0	34	52	69	86	87	87	88	89	89	90	90
Level Ⅲ (r=45m)											
ESE3.0	39	58	78	97	97	98	99	101	102	103	104
LevelL Ⅳ (r=60m)											
ESE3.0	43	64	86	107	107	108	109	111	113	115	116

PIONEER PLUS LY-ESE3.0 Dimensions & Specifications



Main Technical Specifications Table

Pre-discharge Time	△T	60 μ s
Outline Dimension	Length	514mm
	Diameter of Air Terminal Rod	14mm
	Diameter of Trigger Device	83mm
	Diameter of Main Rod	20mm
Weight	Kg	2.7±0.1
Material	Stainless Steel SUS316L	
Coupling Method	Threaded	M16

广州市雷斯盾电气科技发展有限公司
Guangzhou Leisidun Electrical Technology Development Co.,Ltd
Tel/Fax:+86 31195637 Mob/whatsapp+86 13302387375
Email: info@reazychina.com Website: www.reazychina.com
Add:C2,Area A,Jinying Industrial Park,Shiqi Town,Panyu District,Guangzhou,PR China 511400