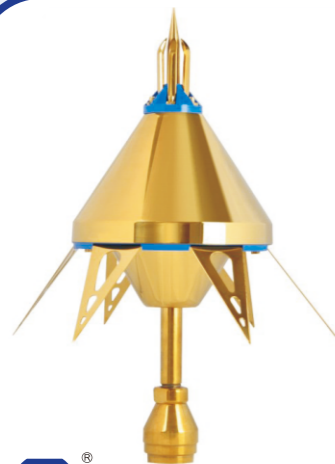




SMART ESE Early Streamer Emission Air Terminal



Protection Area

The protection area(rp) of a Smart-ESE lightning conductor is calculated according to French Standard NFC 17-102:2011, Thus:

$Rp(h) = \sqrt{2rh - h^2 + \Delta(2r + \Delta(2r + \Delta))}$ if $h \geq 5m$
and
 $Rp = hxRp(5)/5$ if $2m \leq h \leq 5m$

The protection area depends on a number of factor:

$h(m)$: is the height of the ESEAT tip over the horizontal plane through the furthest point of the object/area to be protected.

$r(m)$: 20m, 30m, 45m or 60m according to the Protection Level I, II, III or IV assessed for the site using the Risk Analysis calculation (NFC 17-102:2011 Annex A) .

$\Delta(m)$: $\Delta = \Delta T \times 10$ Field experience has proved that is equal to the efficiency obtained during the ESEAT evaluation tests.

Smart-ESE
 WWW.REPSUN.COM

Protection Radius

| Type | Smart-ESE10 | Smart-ESE25 | Smart-ESE28 | Smart-ESE68 | Smart-ESE88 | |
|--------------------------------|----------------|-------------|-------------|-------------|-------------|-------|
| Advanced Triggering ΔT | 10 μs | 25 μs | 40 μs | 50 μs | 60 μs | |
| Dimension | Height | 402mm | 394mm | 394mm | 394mm | 394mm |
| | Diameter(body) | 220mm | 305mm | 305mm | 305mm | 305mm |
| Weight(kg) | 3.0 | 3.8 | 3.5 | 3.5 | 4.0 | |
| Connection | M20 | | | | | |

Protection Level I : r=20m

| H(m) | 2 | 3 | 4 | 5 | 10 |
|-------|----|----|----|----|----|
| ESE88 | 31 | 47 | 63 | 79 | 79 |
| ESE68 | 27 | 41 | 55 | 68 | 69 |
| ESE28 | 23 | 35 | 46 | 58 | 59 |
| ESE25 | 17 | 24 | 34 | 42 | 44 |
| ESE10 | 10 | 15 | 21 | 26 | 28 |

Protection Level II : r=30m

| H(m) | 2 | 3 | 4 | 5 | 10 |
|-------|----|----|----|----|----|
| ESE88 | 34 | 52 | 68 | 86 | 88 |
| ESE68 | 30 | 45 | 60 | 76 | 77 |
| ESE28 | 26 | 39 | 52 | 65 | 67 |
| ESE25 | 19 | 29 | 39 | 49 | 51 |
| ESE10 | 12 | 19 | 25 | 31 | 34 |

Protection Level III : r=45m

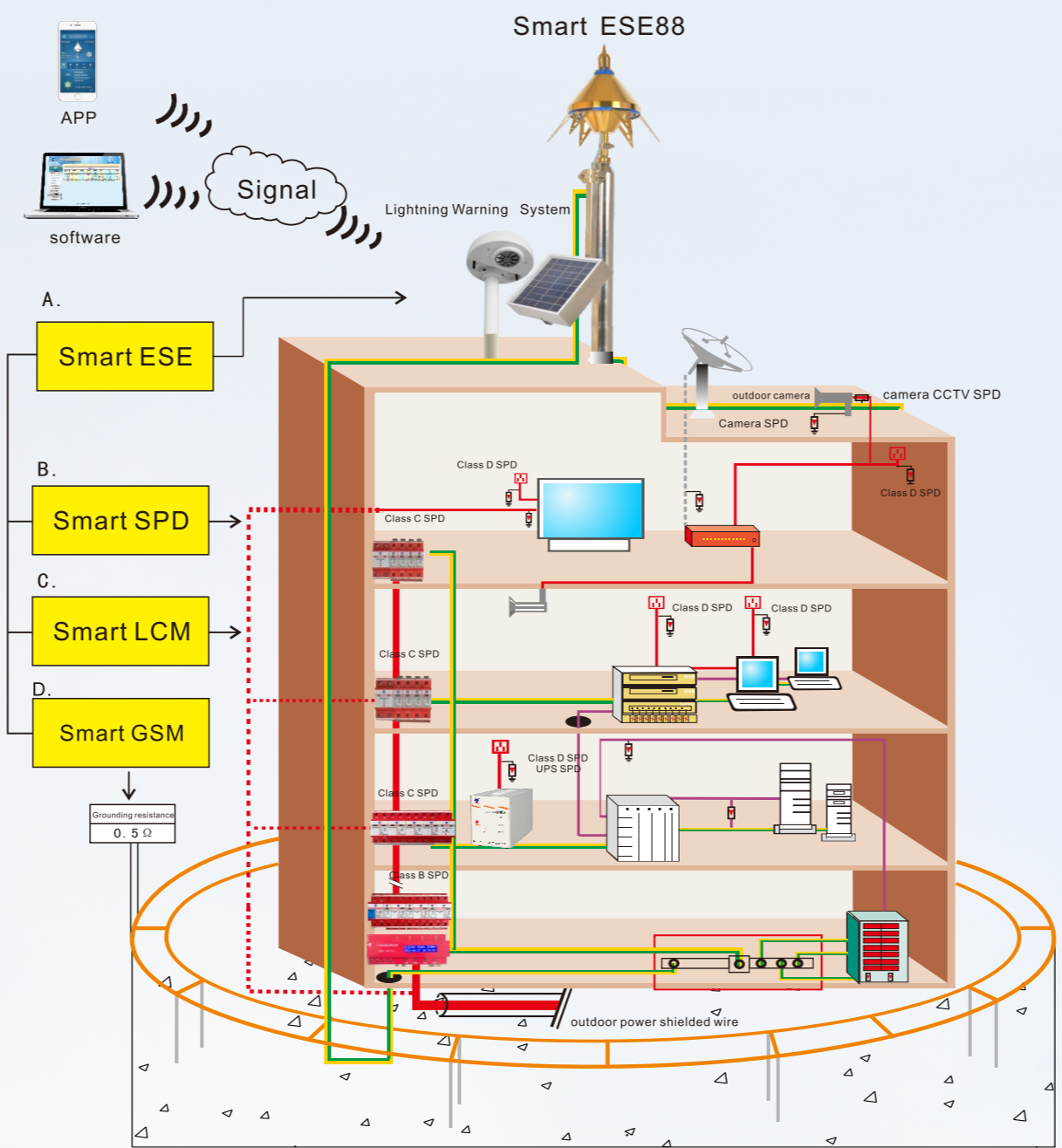
| H(m) | 2 | 3 | 4 | 5 | 10 |
|-------|----|----|----|----|----|
| ESE88 | 39 | 58 | 78 | 97 | 99 |
| ESE68 | 34 | 52 | 69 | 86 | 88 |
| ESE28 | 30 | 45 | 60 | 75 | 77 |
| ESE25 | 23 | 34 | 46 | 57 | 61 |
| ESE10 | 15 | 22 | 30 | 38 | 42 |

Protection Level IV : r=60m

| H(m) | 2 | 3 | 4 | 5 | 10 |
|-------|----|----|----|-----|-----|
| ESE88 | 43 | 64 | 85 | 107 | 109 |
| ESE68 | 38 | 57 | 76 | 95 | 98 |
| ESE28 | 33 | 50 | 67 | 84 | 87 |
| ESE25 | 26 | 39 | 52 | 65 | 69 |
| ESE10 | 17 | 26 | 34 | 43 | 49 |



SMART+COMPREHENSIVE SOLUTION



Remark: ESE: Early Streamer Emission Air Terminal
 SPD: Surge Protective Device
 GSM: Grounding System Monitoring
 LCM: Lightning Current Monitoring



REPSUN Lightning Protection Co., Ltd
 Add: Lixin Industrial Park Shiji Dongyong, Nansha, Guangzhou, China 511453.
 Tel: 86-20-34923866#836 Phone: 86-13923097393
 E-mail: info@xierli.com Web: www.repsun.com



Version 2402



SMART-ESE Early Streamer Emission Air Terminal



REPSUN LIGHTNING PROTECTION CO.,LTD

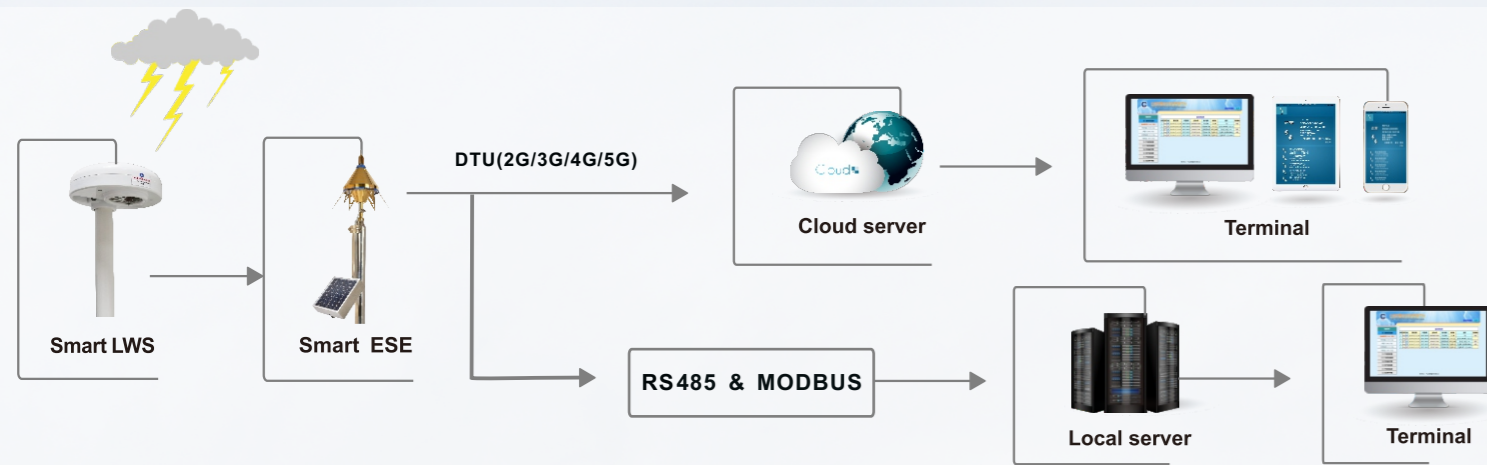


REPSUN, more than a lightning surge protector manufacturer, we provide solutions.

Lightning Warning System

Function:

With REPSUN's REP-LWS, there shall be enough time to take action to prevent damage before lightning strike approaches; to reduce the risk of injury to persons; and economic losses;



Features:

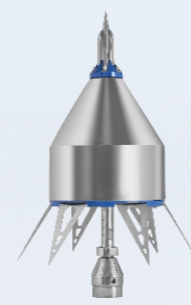
1. Up to 15-20 kilometers detection radius;
2. Rugged construction, long life service;
3. Visual and audible alarms, both on site and by communication like PC, cell phone etc.
4. Optional meteorological sensors for expanded weather monitoring and logging;
5. Low power consumption, low maintenance;
6. Strong anti-interference ability.

Applications:



■ Installation case

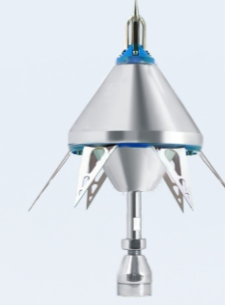
Smart ESE Products



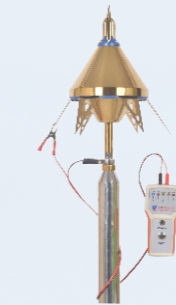
SMART-ESE98
Patents no:ZL 2014 30494762.2



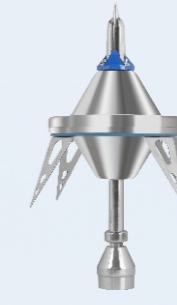
SMART-ESE25
Patents no:ZL 2009 30082009.1



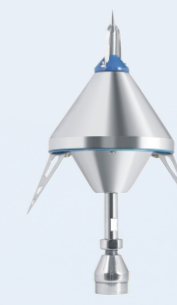
SMART-ESE88
Patents no:ZL 2011 2 0107105.9



SMART-ESE88
(Golden)



SMART-ESE68



SMART-ESE28



SMART-ESE10

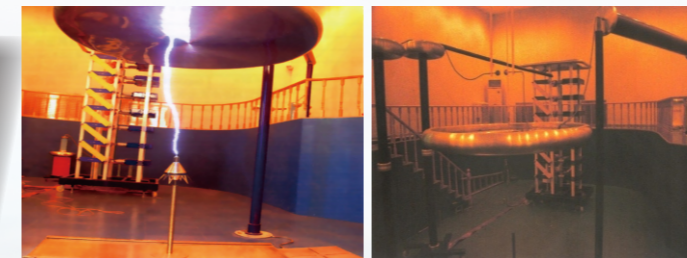
- Lightning Protection
- ESE status
- Lightning counter
- Lightning intensity
- Lightning time
- Temperature and humidity
- Grounding wire connectivity
- Grounding resistance



Key Feature:

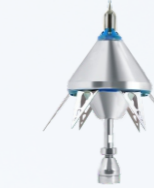
- Web platform and phone APP remote monitoring;
- Equipped with a smart tester;
- CNAS laboratory test report;
- 10 years warranty.

Certificate and test report(In accordance with NFC17-102:2011)



ESE Installation

1.Active Capture Head



2.Elevation Pole



3.Lightning current monitor



4.Lightning Event Counter



5. Test clamp



6.Rod-to Conductor Clamp



7.Earth Clamp



8.Inspection Housing



9. Earth Rod

