VIKING

A SAFER MORE **COST EFFECTIVE AND RELIABLE** ALTERNATIVE
AS COMPARE TO CONVENTIONAL **LIGHTNING CONDUCTOR SYSTEM**

EARLY STREAMER EMISSION
LIGHTNING CONDUCTOR

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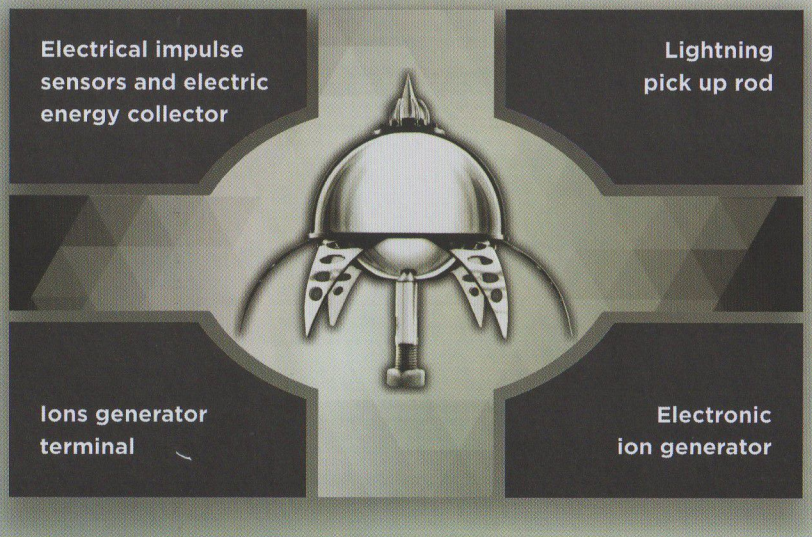
The Viking Early Streamer Emission product operates as ION GUN which fires the large number of ions to the atmosphere just before the lightning strike. Releasing the ions to atmosphere will automatically generate the lightning path is known as upward leader which is earlier than other nearby high point and also reduce the excitation time of CORONA affect.



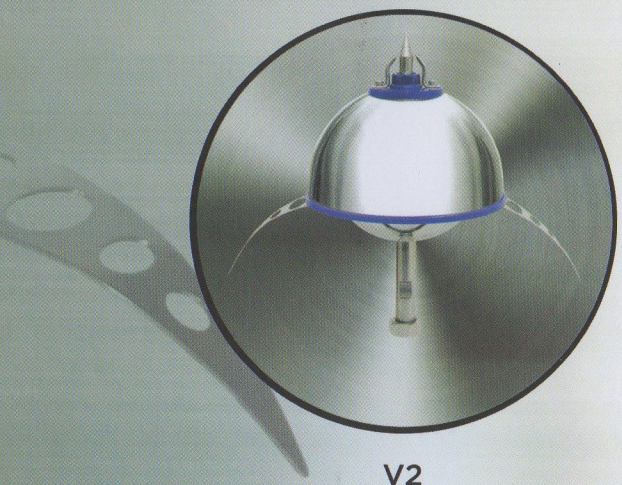
Product Description

The Viking Early Streamer Emission product is equiped with the following:

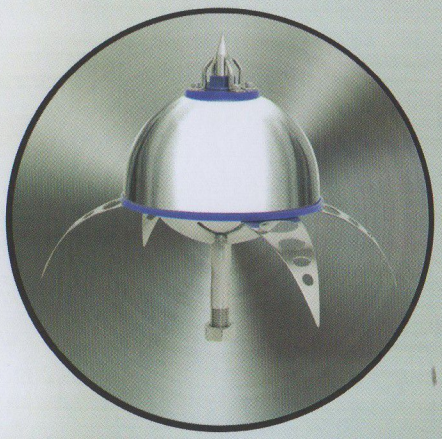
- ☑ Electrical impulse sensors and electric energy collector
- ☑ Lightning pick up rod
- ☑ Ions generator terminal
- ☑ Electronic ion generator

Product Range

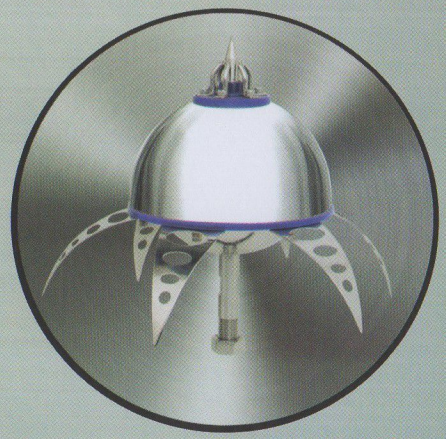
There are 3 models in the VIKING range and each model has different performance specification corresponding to different protection radius. Both model are made of stainless steel which particularly suited to any corrosive environments.



V2



V4



V6

Advantages

- ☑ Long life operating as it works only just before the lightning strike
- ☑ Export quality with robust mechanical designed
- ☑ Performance and reliability tested in a high voltage laboratory by LMK
- ☑ Competitive price on the total system including installation cost as single core down conductor is as our standard recommendation
- ☑ The VIKING Early Streamer Emission is made from stainless steel 304 Metal body and suitable for corrosive area.

According to formula defined by French National Standard NF C 17 – 102, the protection radius Rp of VIKING Lightning conductor is calculated by the following formula :

$Rp\ (m) = \sqrt{h\,(2D - h) + \Delta L\,(2D + \Delta L)}$, where $h > 5$ m

where $h \leq 5$ m, protection radius is taken of the table shown below.

h (m) = Height of VIKING above the area tobe protected.
If the VIKING is tobe used to protect the building, the height of mast should be added by the height of building to calcutaled the radius protecting at the ground level of building.

D (m) = Striking distance in value 20m, 45m or 60m depending on the protection level required according to the lightning risk on the area tobe protected.

$\Delta L\ (m) = 10^6\ \Delta T\ (\mu sec)$

$\Delta L\ (\mu sec)$ = Triggering advance which determined in High Voltage Test Laboratory depending on the selected Type of VIKING.

LEVEL PROTECTION VIKING

Level 1 protection : D = 20 m

Type \ h(m)	2	3	4	5	6	7	8	10	15	20
V2	47	47	47	48	48	48	49	49	50	50
V4	78	78	78	79	79	79	79	79	80	80
V6	88	88	89	89	89	89	89	89	90	90

Level 2 protection : D = 45 m

Type \ h(m)	2	3	4	5	6	7	8	10	15	20	45
V2	61	62	63	63	64	65	65	66	69	71	75
V4	96	96	97	97	97	98	98	99	101	102	105
V6	107	107	107	108	108	109	109	110	111	112	115

Level 3 protection : D = 60 m

Type \ h(m)	2	3	4	5	6	7	8	10	15	20	45	60
V2	69	70	70	71	72	73	73	75	78	81	89	90
V4	105	106	106	107	107	108	108	109	111	113	119	120
V6	116	117	117	118	118	119	119	120	122	124	129	130

Type	ΔT(Qsec)	Weight (Kg)
V2	30	3.7
V4	60	4.1
V6	70	4.3