

DUVAL MESSIEN

A know how famous since more than one century

Satelit™ +G2



Your solution against lightning

Satelit™+G2, second generation of Satelit+ Early Streamer Emission range, offers by the structure of its optimized electrical circuits and the use of specific components developed by our engineers, improved performances of impulsional capacity of ionization whose efficiency and reliability are proven with tests of compliance with NFC 17 102 standard done by independent laboratories in France and abroad.

For professional and simple uses, the correct working of the Satelit™+G2 can be checked with its specific tester.

Certified lightning rods

The products of Satelit™+G2 range have been tested at the test Center of Bazet (independent laboratory in France), certified COFRAC as well as Beijing laboratory (China). The tests done according to the NFC 17- 102 standard (September 2011) confirm the Satelit™+G2 performances.

The range Satelit™+G2 obtained also certifications for corrosion resistance (environmental test) and lightning current test (100 kA).

Satelit™+G2 range

This one is declined following 4 models with different performances:

- Satelit™+G2-1000 => Excitation Advance (ΔT) = 10 μ s
- Satelit™+G2-2500 => Excitation Advance (ΔT) = 25 μ s
- Satelit™+G2-4500 => Excitation Advance (ΔT) = 45 μ s
- Satelit™+G2-6000 => Excitation Advance (ΔT) = 60 μ s

The radius of protection (R_p), classified by level of protection from 1 to 4, result of the application of the formula defined in the NFC 17-102 standard :

$$R_p = \sqrt{2rh - h^2 + \Delta(2r + \Delta)} \text{ for } h \geq 5m \text{ and}$$

$$R_p = hXR_p(5) / 5 \text{ for } 2m \leq h \leq 5m$$

where

R_p (h in m) answers to the radius of protection at a given height h ;

H (m) answers to the height of the ESE end on the horizontal plan until the farthest point of the object to protect :

r (m) 20m, 30m, 45m & 60m according to the level of protection 1, 2, 3 & 4

$$\Delta(m) = \Delta t \times 10^6$$



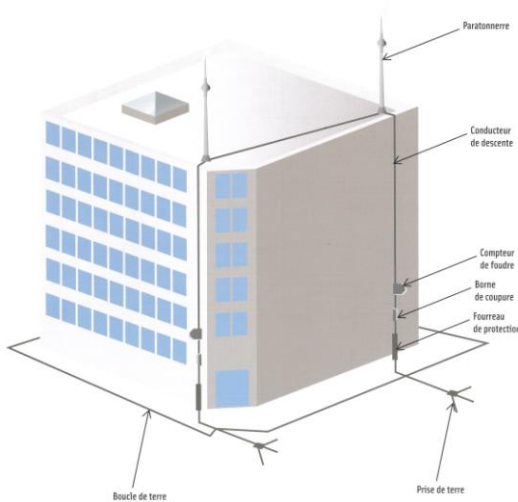
Certifié ISO 9001 QUALIFOUNDRE MASE QUALIFELEC

January 2019

Principle of functioning

A building or a site protection may require one or several lightning rods regarding to the expected level of protection and the area to protect.

The installation of a lightning protection with ESE should answer to the NFC 17-102 standard prescriptions.



Type of SATELIT™+G2	Height of the point (in meters)							
	2	4	5	7	10	15	20	30
Radius of protection								
LEVEL 1								
SATELIT™+G2-1000	10	20	26	27	28	30	30	30
SATELIT™+G2-2500	17	34	42	43	44	45	45	45
SATELIT™+G2-4500	25	51	63	64	64	65	65	65
SATELIT™+G2-6000	32	64	79	79	79	80	80	80
LEVEL 2								
SATELIT™+G2-1000	12	25	31	33	35	37	39	40
SATELIT™+G2-2500	20	40	49	50	51	53	54	55
SATELIT™+G2-4500	30	60	71	71	72	73	74	75
SATELIT™+G2-6000	34	68	86	87	88	89	89	90
LEVEL 3								
SATELIT™+G2-1000	15	30	38	40	42	46	49	53
SATELIT™+G2-2500	23	46	57	59	61	63	65	68
SATELIT™+G2-4500	34	64	81	82	83	85	86	89
SATELIT™+G2-6000	40	78	97	98	99	101	102	104
LEVEL 4								
SATELIT™+G2-1000	18	37	43	46	49	54	57	63
SATELIT™+G2-2500	26	52	65	66	69	72	75	80
SATELIT™+G2-4500	36	72	89	91	92	95	97	101
SATELIT™+G2-6000	44	87	107	108	109	111	113	116

Technical features

Reference :	SATELIT+G2 1000/2500/4500/6000
Use :	Capture and excitation devices designed for protecting structures, buildings and open areas against lightning direct impacts.
Modes of test :	Wire method Until 8m with test perch
Operation mode :	Polarization of the point until 30kV
Material :	POLISHED INOX
Colour :	White metal
Dimensions & weight :	Point Ø16 – 3,6 kg
Models (excitation) :	10 / 25 / 45 / 60 microseconds
Standard :	NF C17-102 (September 2011)
Warranty :	2 years



Lightning counter

During the maintenance of the installations and periodical checking, the lightning counter is necessary.

CCF03 counter is designed for counting lightning shocks flowing on the down conductors.

The mounting is done in parallel on the down conductor with two clamping collars and four M6x13 stainless steel screws. Electric power supply is not necessary.



Join us on :



Duval Messien Tel:+33 1 60 18 58 70 / Fax :+33 1 60 18 58 71 – Email : contact@duval-messien.fr
 30 rue de la Varenne – 94100 Saint Maur des Fossés – France - Web : www.duval-messien.fr
 Agence Ouest (Nantes) Tel :+33 2 40 54 79 30 - Agence Sud Est (Velaux) Tel :+33 4 42 34 71 00