FRANKLINFRANCE ACTIVE 1D+



NEW GENERATIONEARLY STREAMER EMISSION

PROTECT YOUR INFRASTRUCTURE WITH THE TECHNOLOGY OF TOMORROW



WHY CHOOSE THE ACTIVE 1D+?

INNOVATION AT THE SERVICE OF YOUR SAFETY

The new Active 1D+ lightning rod is designed for maximum safety during storms. Its modern design, lightweight design, and new advanced performance tests make it the ideal solution for protecting your infrastructure. Its nickel-plated copper tip offers better laboratory results and amplifies its triggering potential thanks to its shape. Designed to withstand extreme weather conditions, it offers great durability and excellent corrosion resistance. In addition, this device requires no power source or specific maintenance, thus ensuring high reliability of the Active 1D+.

OPTIMAL PROTECTION AGAINST LIGHTNING

The advance of the Active ID+ lightning rod is obtained by the polarization (positive or negative) of its internal device connected to its tip subjected to the storm electric field. As the precursor phenomena of the lightning strike approach, this internal oscillating device is powered by the natural corona effect and brings the tip of the tip to a high voltage potential (> 20kV) in synchronization with the precursor phenomena of the lightning strike. The resulting strong amplification of the ionization at the tip of the lightning rod triggers the early emission of an ascending tracer at the right time for connection with the descending tracer of the cloud and the capture of the lightning strike safely.

ACTIVE 1D+ REVIEW

The lightning rod can be tested on site with the AFV0050TT wired test box (initial check, periodic checks according to NFC 17-102 standard and current decrees, maintenance). Simple and quick, this test can be carried out either by removing the lightning rod, or by using the AFV0087PT test pole, which allows lightning rods to be checked at a height of 8 meters without removing them. This tester is powered by a battery (supplied). The indicator light display instantly indicates the result obtained (positive or negative).

ECO-RESPONSIBLE

The Active 1D+ stands out for its ease of installation and ultra-fast setup: simply attach the tip, reducing intervention time. Lighter, weighing only 2.2 kg, it optimizes transport costs, particularly for export. Its eco-designed packaging made from recycled cardboard, without plastic, reduces the environmental impact while being more sustainable. Manufactured and assembled in France, the Active 1D+ favors local and responsible production, thus limiting its carbon footprint.

100% MADE IN FRANCE

PERFORMANCE AND COMPLIANCE

Active 1D+ technology offers guarantees of optimal performance and repeatability.

The requirements and test procedures of Annex C of NF C 17-102: 2011 were strictly observed: complete sequence of consecutive tests on the same lightning conductor. Laboratory efficiency tests revealed a very low dispersion of the lightning rod results (standard deviation) demonstrating optimal repeatability of its starting device.

Insulation against extreme weather conditions (heavy rain) has been reinforced, providing reliability of the protection zone.

Franklin France exceeds regulatory requirements with major certifications:









All tests and trials carried out on the Active 1D+ were inspected by Bureau Veritas, which validated and certified its effectiveness.









APPROVED TESTS



Marking tests: unique, tamper-proof and permanent laser



Mechanical tests: dimension and quality of materials



Environmental tests: salt fog, sulfurous atmosphere



Electrical tests: 100 kA impulse current resistance – 10/350µs



Efficiency tests: priming advance and standard deviation



((9)) EMC tests: electromagnetic immunity and emission limits

INCREASED PROTECTION ZONE

The Active 1D+ protection radii indicated below are defined for the four lightning protection levels LPL (from I to IV) based on the actual height h between the tip of the lightning rod and the highest point to be protected.

- Rp (m) corresponds to the protection radius at a given height h;
- h (m) corresponds to the height from the end of the PDA on the horizontal plane to the point furthest from the object to be protected;
- r (m) depends on the level of lightning protection
 - 20 m for protection level I;
 - 30 m for protection level II;
 - 45 m for protection level III;
 - 60 m for protection level IV;
- Δ (m) = Δ T x 10^6 ; Δ T (μ s) being the efficiency of the PDA;





Active 1D+	ACTIVE 1D+ 12 µs			ACTIVE 1D+ 25 µs				ACTIVE 1D+ 45 µs				ACTIVE 1D+ 60 µs				
h(m)	I	Ш	III	IV	1	Ш	III	IV	- 1	II	III	IV	- 1	Ш	III	IV
2	- 11	13	16	19	17	20	23	26	25	28	32	36	31	34	39	43
4	23	27	32	37	34	39	46	52	51	57	65	72	63	69	78	85
5	28	34	41	46	42	49	57	65	63	71	81	89	79	86	97	107
6	29	34	42	48	43	49	58	66	63	71	81	90	79	87	97	107
8	30	36	43	50	43	50	59	67	64	72	82	91	79	87	98	108
10	30	37	45	52	44	51	61	69	64	72	83	92	79	88	99	109
20	32	41	51	60	45	54	65	73	65	74	86	97	80	89	102	113
30	32	42	55	65	45	55	68	80	65	75	89	101	80	90	104	116

ACTIVE 1D+ RANGE

Model	ΔT(μs)	Lightning counter				
AFB20121D	12	Not included				
AFB27121D	12	Included				
Model	Δ Τ(μs)	Lightning counter				
Model AFB20451D	ΔT(μs) 45	Lightning counter Not included				

Model	ΔT(μs)	Lightning counter
AFB20251D	25	Not included
AFB27251D	25	Included
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Model	ΔT(μs)	Lightning counter
Model AFB20601D	ΔT(μs) 60	Lightning counter Not included



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