TECHNICAL DATASHEET

CHARACTERISTICS

Reference	90315	
Designation	**IONIFLASH MACH® NG15**	
Durability *(No planned obsolescence)* **Warranty**	35 years **10 years**	
Efficiency NF C 17-102:2011	ΔT	15µs
Insulation IEC 60060-1	>97%	
Net Weight	1,8kg	
Fastening	Triple security on anti-vibration pole	

PERFORMANCES

Security of the current flowing IEC 62561	Electrical and physical continuity from the IONIFLASH® to the earth – Axle 16mm	
ESEAT / Simple rod Standard deviation	σ	σ (ESEAT) < 0.755 σ (Simple rod)
Lightning strike: IEC 62561 / NF C 17-102:2011 (wave 10/350µs)	Standard Test	100kA
		214kA
Functioning for positive and negative lightning strikes	Range of detection of the frequency spectrum of lightning (0 to 10MHz). Self-contained triggering of the leader	
Early streamer emission spherical technology	New Generation Patent FR2953337	
Reliability of the protection – Repeatability of the answer of the upward leader	Stability of the laboratory tests and in situ tests (Ampère CNRS / In situ France telecom)	
Safety in extreme climatic conditions	Direct electrostatic activation with internal and external double spark gaps	
Security of the lightning current flowing	Manufacturing with passed through axle of 16mm diameter	
Resistance to corrosion	AISI / Solid 316L stainless steel	
Testing device	Checking with **IONITEST®** device	

INSTALLATION AND ACCESSORIES

Installation	Delivered ready to be installed – without electronic components
Connection to the down conductor	Stainless steel or tinplated copper collar
Accessories	High safety fastening piece
Documentation	Warranty and authentication certificate can be download on www.check.ioniflash.com Guide book – Control report

CERTIFICATIONS

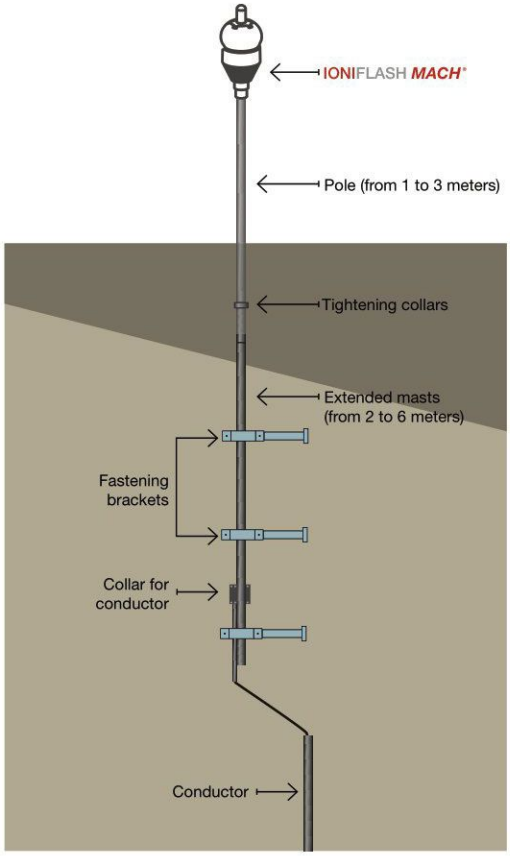
NF C 17-102:2011	Certificate Bureau Veritas
Qualifoudre (INERIS)	Certificate N° 051168729019
Carbon Footprint	**Carbon Footprint 0933 C240 Ademe**
ISO 9001/2015	Certifié ISO 9001

As part of our innovation and improvement process framework, we reserve the possibility to modify the form, characteristics and dimensions without notice. The illustrations are therefore given without obligation.

RADIUS OF PROTECTION

RADIUS OF PROTECTION OF IONIFLASH MACH® NG15 NFC 17102 (2011)				
Height (m)	**Level I**	**Level II**	**Level III**	**Level IV**
2	13	15	18	20
5	32	37	45	51
8	33	39	47	54
10	34	40	49	56
15	35	42	52	60
20	35	44	55	63
30	34	45	58	69
45	24	42	60	73
60		34	58	75

The level of protection is given using NFC 17-102 ed. 2011, or EN 62305-2, or using the FDC 17-108 guide. If the site presents a risk for the environment the protection radius must be reduced of 40%. For a level of protection I++ [cf. 5.2.3.5 NFC 17-102], the radius of protection must be reduced of 40%



RELIABILITY OF THE IONIFLASH MACH®

- Higher efficiency demonstrated
- Double security thanks to the two spark gaps dimensioned to have an operating range adapted to the frequential spectrum of the lightning (0 to 10 MHz)
- Electrical and physical continuity from the IONIFLASH® tip to the earth
- Reliable and autonomous device even in extreme climatic conditions
- Support tools fort the study and installation (software IONEXPERT 3000®, operational tests devices IONICHECK®, IONICOUNT® impulse counter)
- 10 years guarantee. Lifetime of 35 years.
- 316L stainless steel, protective fairing.
- Lowest carbon footprint 33kg eq. CO2 / unit
- Net weight: 1,8kg – quick fastening
- Tested in accordance to the standards NFC 17-102 ed. 2011, EN 50164-1, IEC 60060-1, UNE 21186, manufacturing in accordance with ISO 9001: 2015