

## TECHNICAL DATASHEET

### CHARACTERISTICS

|                                           |                                       |            |
|-------------------------------------------|---------------------------------------|------------|
| Reference                                 | 90180                                 |            |
| Designation                               | IONIFLASH MACH <sup>®</sup> NG 30 TF  |            |
| Durability (without planned obsolescence) | 35 years<br><b>GUARANTEE 10 years</b> |            |
| Efficiency NF C 17-102 (2011)             | $\Delta T$                            | 30 $\mu$ s |
| Weight                                    | 2.2 kg                                |            |

### PERFORMANCES

|                                                                             |                                                                                                                             |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Security of current flow IEC 62 561                                         | Electrical and physical continuity without disconnection of the IONIFLASH axle until the earth<br>$\varnothing$ Axle = 16mm |
| E.S.E. Standard deviation / Simple rod                                      | $\sigma$ ESE / $\sigma$ Simple rod = 0,46                                                                                   |
| Lightning impact: IEC 62 561 / NF C 17-102                                  | Standard test = 100 kA                                                                                                      |
| Test realized in 10/350 $\mu$ s wave                                        | Realized test = 215 kA                                                                                                      |
| Functioning in positive and negative impacts                                | Detection range of lightning frequency spectrum (0 to 10 MHz)<br>Autonomous triggering of the leader                        |
| Rain conditions insulating test according to IEC 60 060-1 standard          | >97%                                                                                                                        |
| Early streamer emission spherical technology                                | New generation patent FR 2953337                                                                                            |
| Protection reliability – repeatability of the response of the upward leader | Stability of the laboratory tests and in situ tests (Ampère CNRS/In situ France Telecom)                                    |
| Security in extreme weather conditions                                      | Direct electrostatic activation with double spark gaps, internal and external                                               |
| Corrosion resistance                                                        | AISI/ Massive 316 L Stainless steel                                                                                         |

### INSTALLATION AND ACCESSORIES

|                            |                                                                                                                                                                       |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Installation               | Delivered ready to install                                                                                                                                            |
| Down conductors connection | Stainless steel or tinned copper collar                                                                                                                               |
| Test device (option)       | Testing with <b>MACHTEST<sup>®</sup></b>                                                                                                                              |
| Documentation              | Guarantee and authenticity certificate can be downloaded on: <a href="http://check.ioniflash.com">check.ioniflash.com</a><br>Guidebook – final production certificate |

### CERTIFICATIONS

|                          |                                          |
|--------------------------|------------------------------------------|
| NF C 17-102 (2011)       | Ampère CNRS laboratory                   |
| Qualifoudre (INERIS)     | N° 051168729019 certificate              |
| <b>Carbon assessment</b> | <b>CARBON ASSESSMENT 0933 C240 Ademe</b> |
| ISO 9001/2015            | N° FR 034743-1 certificate               |



CONFORM TO  
NF C 17-102 : 2011  
IEC 60060-1

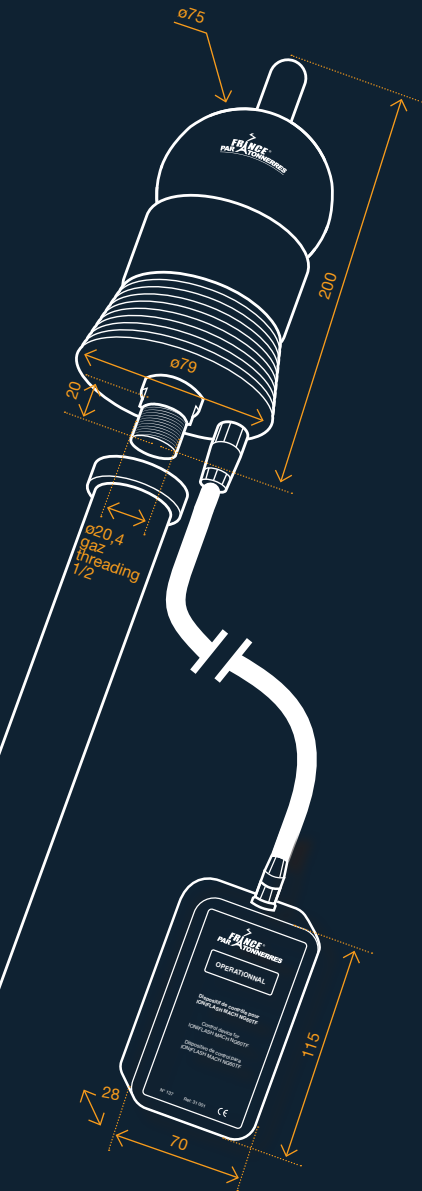
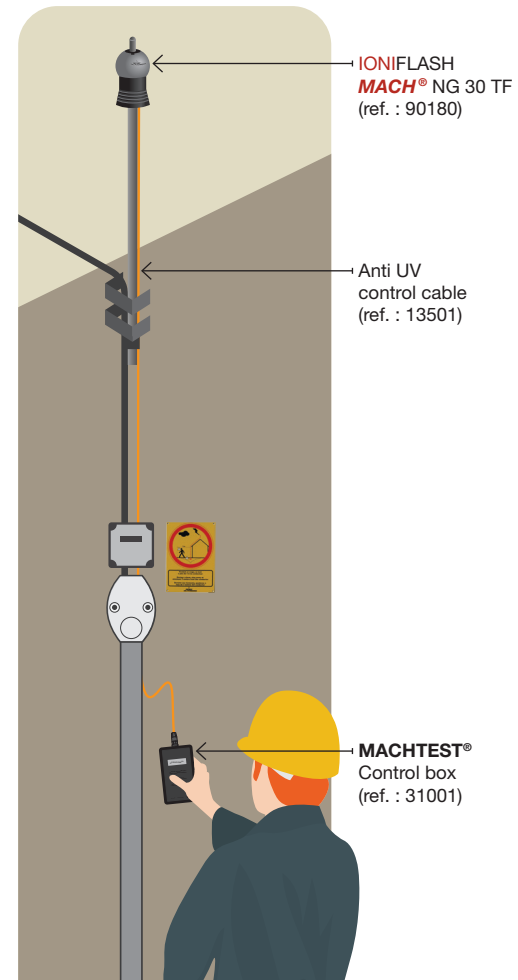
## ACCESSORIES

| Reference    | 31001                            | 13501                          |
|--------------|----------------------------------|--------------------------------|
| DESIGNATION  | <b>MACHTEST<sup>®</sup></b>      | <b>7 meters control cable*</b> |
| FEATURE      | LCD Display                      | UV and rain protection         |
| POWER SUPPLY | 3 AAA batteries 1,5 V (supplied) | No                             |
| WEIGHT       | 100 g                            | ≈ 60g/m                        |
| DIMENSIONS   | 115x70x28                        | Ø 7 mm                         |
| GUARANTEE    | 1 year                           | 10 years                       |

\*Cable length adapted on demand, until 100 m

## TEST PRINCIPLE

- The cable continuously connected to the ESEAT allows a direct communication.
- For the control of the functioning of the ESEAT, from the ground or the roof, the MACHTEST<sup>®</sup> control box is connected to the cable.
- With the connection of the MACHTEST<sup>®</sup>, the control procedure starts automatically.
- At the end of the sequence, the result of the test is directly available on the MACHTEST<sup>®</sup> control box avoiding all risks of misinterpretation and lack of visibility.
- At the end of the test, the MACHTEST<sup>®</sup> is disconnected and stored (no elements exposure).



## PROTECTION RADIUS

PROTECTION RADIUS  
OF IONIFLASH MACH<sup>®</sup> NG 30 TF / NF C 17-102 (2011)

| Height (m) | Level I | Level II | Level III | Level IV |
|------------|---------|----------|-----------|----------|
| 2          | 19      | 22       | 25        | 28       |
| 5          | 48      | 55       | 63        | 71       |
| 8          | 49      | 56       | 65        | 73       |
| 10         | 49      | 57       | 66        | 75       |
| 15         | 50      | 58       | 69        | 78       |
| 20         | 50      | 59       | 71        | 81       |
| 30         | 49      | 60       | 73        | 85       |
| 45         | 43      | 58       | 75        | 89       |
| 60         | 30      | 52       | 73        | 90       |