



# DUVAL MESSIEN

LA MAITRISE DE LA FOUDRE  
HIGH TECH FOR LIGHTNING PROTECTION

## SATELIT<sup>®</sup> 3

In compliance with NF C17-102 standard( 2011)

Ref : PDASAT3N-25 / 45 / 60

Early Streamer Emission lightning rods (ESE) of« SATELIT<sup>®</sup>3 » range of « Duval Messien » brand consist of a strike point, an excitation device (body) and a support rod.

Preferentially installed at the highest point of the structure which supports them, they are always at the highest points of the area they protect.

They are characterized by their  $\Delta T$  excitation advance and can be tested at distance with their associated test boxes ref. TESTS3N.

SATELIT<sup>®</sup>3 is designed around a stainless steel hull in order to guarantee a very high resistance to shocks, to corrosion and to chemical agents. It can be installed without fear in chlorinated areas, in countries with high humidity rate or on exposed industrial sites.






ESE electronic cards are perfectly protected inside the stainless steel body and tropicalized in order to guarantee an optimal resistance to humidity.

It is supplied with an accumulator of type NI-MH, (re)loaded permanently thanks to 6 solar modules especially developed for Duval Messien. These solar cells are encapsulated in an epoxy resin resistant to UV and chemical agent, which gives them a perfect waterproofing and an excellent protection to external aggressions.

They do not yellow and crack in time.



### SATELIT<sup>®</sup> 3 advantages

-  Replaceable battery : from 4,8V / 800mAh
-  Low consumption
-  Testable at distance, range of 100 m in free field
-  Protected antenna of communication
-  Double device of passive and active polarization



Last update : 24/03/2020 - Version 2.0

1/3

Système de management certifié

Siège social : 30 RUE DE LA VARENNE - 94100 SAINT-MAUR-DES-FOSSES Tel. : +33 (0)1 60 18 58 70 Fax : +33 (0)1 60 18 58 71 - e-mail : [contact@duval-messien.fr](mailto:contact@duval-messien.fr)

Agence sud : ZA La Verdrière - F -13880 Velaux Tel. : +33 (0)4 42 34 71 00 Fax : +33 (0)4 42 87 40 76 S.A.S. au capital de 504 425€ Siren/RC B 582 093 530 - APE 2712 Z



## SATELIT<sup>®</sup> 3 operating principle

This new lightning rod is equipped with a double device of polarization. The first, active, collects and stores the solar energy in the batteries then load the power capacitors to maintain the ascending tracer propagation. A sensor of integrated current allows measuring the current during a descending tracer approach in the zone of protection and when it exceeds 1A, the sensor triggers the capacitors discharge and releases then the necessary energy to the ascending tracer propagation polarizing the point at a voltage between 20 and 30 kV.

The second device named « passive », at a stormy weather approach, an integrated sensor measuring the ambient electrical field value stores the electrostatic energy present in the atmosphere at a stormy cloud approach and triggers the impulse device as most of the standard Early Streamer Emission lightning rods. This one creates an almost instantaneous inversion of the lightning rod head polarity generating a sudden amplification of the electrical field on its point.

## DESCRIPTION

Reference :	<b>PDASAT3N25 / 45 / 60</b>
Use :	Capture and excitation device designed for protecting the structures, buildings and open areas against lightning direct impacts.
Modes of test :	<ul style="list-style-type: none"><li>- At distance, by radio communication in 433 MHz / FM</li><li>- Mechanical at 8m with a test perch</li></ul>
Mode of operating :	Polarization of the point until 30kV
Material :	STAINLESS STEEL + POLYCARBONATE
Color:	Metal and dark grey
Supply :	<ul style="list-style-type: none"><li>- Battery NI-MH 4,8 V / 800 mAh</li><li>- 6 solar modules (8V total)</li></ul>
Dimensions :	Ø200 x 990
Weight :	5,5 kg
Standard :	<b>NF C17-102 (2011)</b>
Warranty :	2 years

**Nota :** This material has been tested according to the standards in force and is in compliance with the expected environmental tests. Nevertheless, before using in severe environment (high temperature, corrosive atmosphere, etc.) contact the manufacturer to be sure that this product is in compliance with your need.

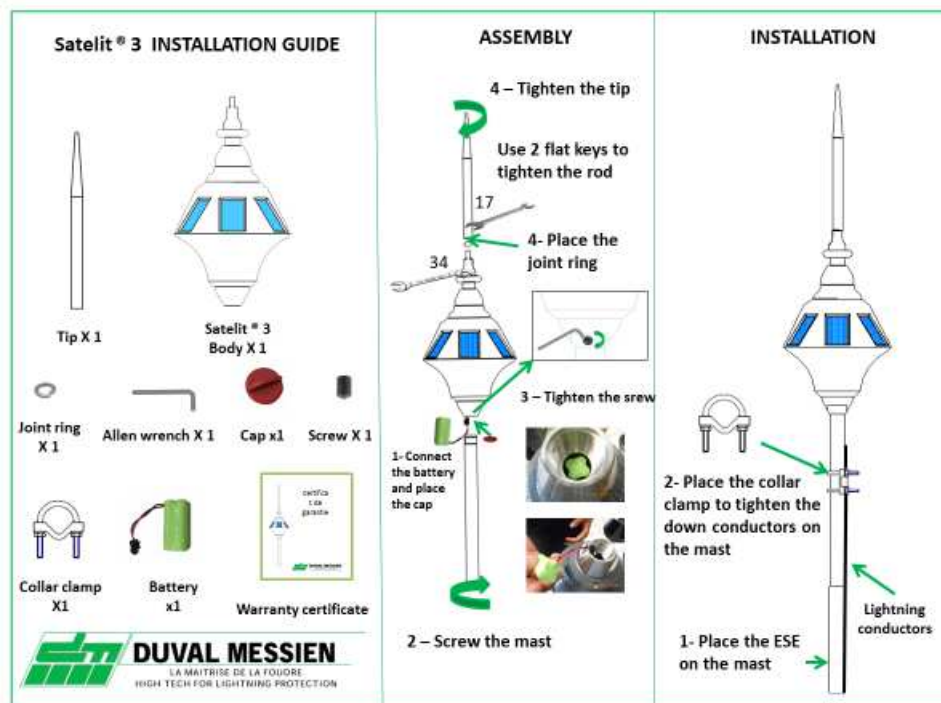




# DUVAL MESSIEN

LA MAITRISE DE LA Foudre  
HIGH TECH FOR LIGHTNING PROTECTION

## INSTALLATION



## IDENTIFICATION OF THE COMPANY.

<b>Manufacturer :</b>	<b>DUVAL MESSIEN S.A.S.</b>
<b>Address :</b>	30 Rue de la Varenne 94100 SAINT MAUR DES FOSSES
<b>Phone :</b>	+33 (0) 1 60 18 58 70
<b>Fax :</b>	+33 (0) 1 60 18 58 71
<b>E-mail :</b>	<a href="mailto:contact@duval-messien.fr">contact@duval-messien.fr</a>
<b>Website :</b>	<a href="http://www.duval-messien.fr">http://www.duval-messien.fr</a>



Last update : 24/03/2020 - Version 2.0

3/3

Système de management certifié

Siège social : 30 RUE DE LA VARENNE - 94100 SAINT-MAUR-DES-FOSSES Tel. : +33 (0)1 60 18 58 70 Fax : +33 (0)1 60 18 58 71 - e-mail : [contact@duval-messien.fr](mailto:contact@duval-messien.fr)

Agence sud : ZA La Verdrière - F -13880 Velaux Tel. : +33 (0)4 42 34 71 00 Fax : +33 (0)4 42 87 40 76 S.A.S. au capital de 504 425€ Siren/RC B 582 093 530 - APE 2712 Z