



Lightning Products

Early Streamer Emission (ESE)

ACTIVE 4D®

Early streamer Emission Use

The principle of the ESE **Active 4D®** is not only to initiate the upward leader, but to provide the energy needed to ensure its propagation until the junction with the downward leader.

A first device, called “impulse device”, stores the electrostatic energy present in the atmosphere at the approach of a stormy cloud.

A second device called, “power device”, allows to collect and store the solar energy in power capacitors. The **Active 4D®** is, thus, permanently pre-loaded of an important energy which enables him to constantly support the propagation of the tracer.

When a stormy cloud approaches, an integrated sensor measures the value of the electrical field and triggers the impulse device. The innovation of this lightning conductor comes from the use of a second integrated sensor which measures the intensity of the electrical discharge current.

When the downward leader enters in the lightning protection zone, the measured current increases highly. As soon as this current exceeds a characteristic threshold (1A), the power capacitors / the power device discharge and release the necessary energy for the propagation of the upward leader. In the latter device, the head of the lightning conductor acts as a capture organ.

It is consequently, electrically insulated from the earth.



Activ'control (AFV2000TT)
not included

Active 4D® 60 – AFB18604D				
Rp (m)	T = 60 µs			
Height (m)	I	II	III	IV
2	31	34	39	43
4	63	69	78	85
5	79	86	97	107
6	79	87	97	107
8	79	87	98	108
10	79	88	99	109
20	80	89	102	113
30	80	90	104	116
60	80	90	105	120

Franklin Technologie® - A full range of lightning and overvoltage protection.

In the continue framework of its products, Franklin France shall be entitled to modify specifications without notice

FRANKLIN FRANCE

FT185GB.QLF.00



Storm detection operating

The **Active 4D®** has two sensors which measure the values of the electrostatic and electromagnetic fields. The value of the alarm threshold is configured from a software installed in a computer. The detection radius reaches about 30 kilometers.



Lightning counter operating

The **Active 4D®** has a built in lightning strike counting device. The information on the lightning impact is transferred to the software and shows precised information such as the date of impact, the time of impact and even its current / intensity value (in amperes) of the lightning impact.



Tests and analyzes operating

From the computer, can be run tests at distance to check the operating system of the **Active 4D®**. The test is run immediately, at distance with results.

- Graphic with values of the tension generated by the solar cells,
- Graphic with values of the battery tension,
- Graphic and values of the temperature evolution of the lightning conductor in degrees Celsius,
- Test and value of the VHV.

Features :

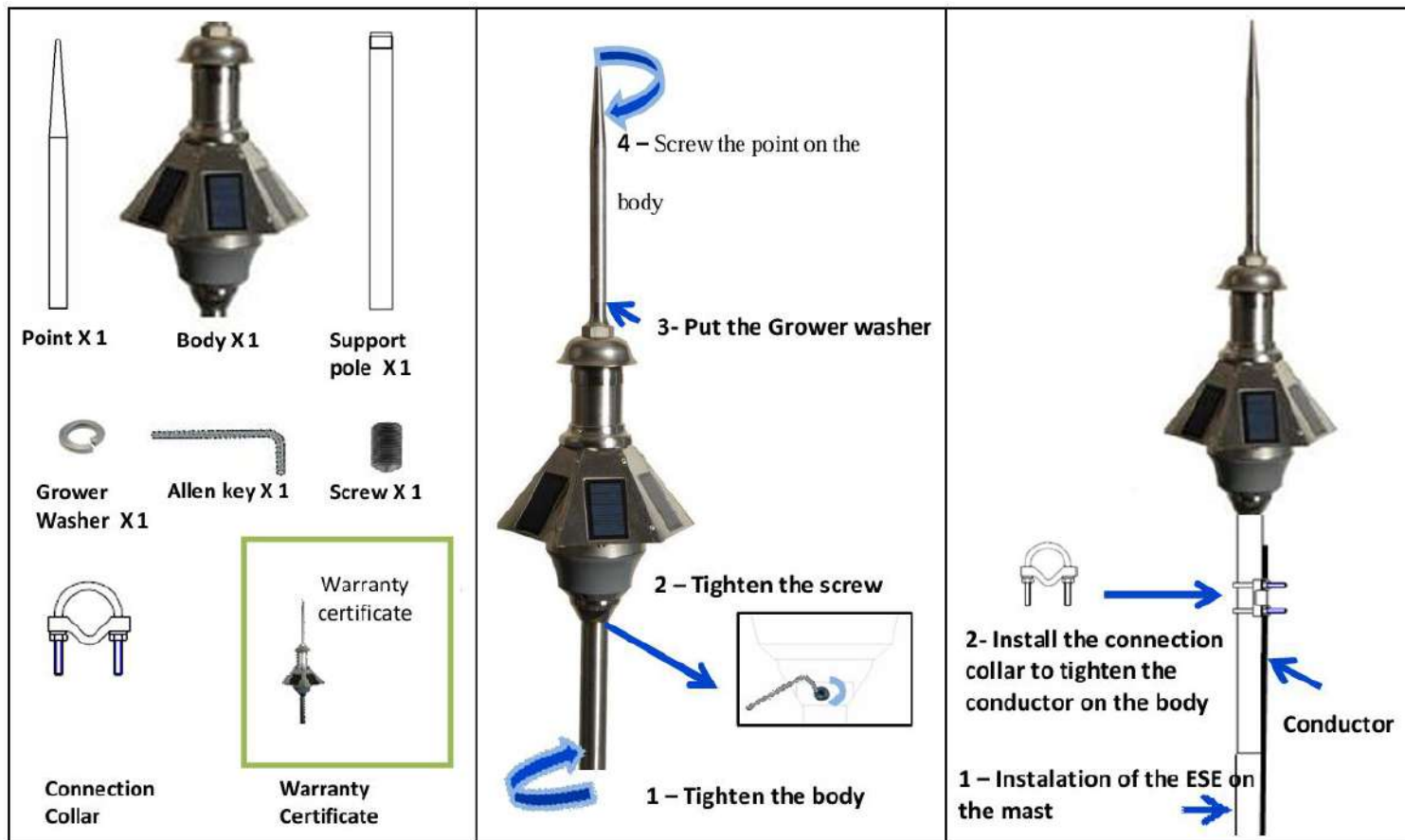
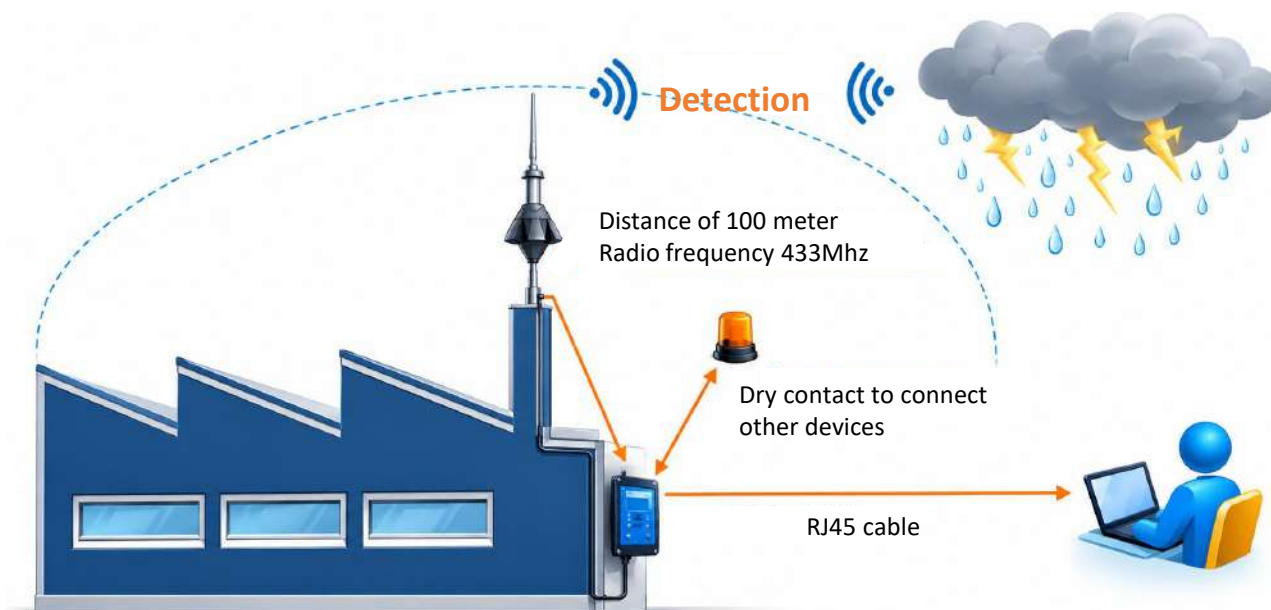
Referencia :	AFB18604D
Montaje :	Encajamiento del pararrayos en el mástil nº1 (recubrimiento de 25cm), instalación y apretamiento con un sistema de fijación FRANKLIN France según la altura y la resistencia a la nieve y al viento
Utilización :	Protección exterior de los edificios/estructuras
Fijación :	Testable a distancia con su Activ'Control
Material :	Acero inoxidable
Dimensiones :	1000 x Ø max 250 mm
Peso :	5,2 kgs
Normas :	NFC 17 102

Franklin Technologie ® - A full range of lightning and overvoltage protection.

In the continue framework of its products, Franklin France shall be entitled to modify specifications without notice

FRANKLIN FRANCE

ASSEMBLY AND INSTALLATION



Franklin Technologie® - A full range of lightning and overvoltage protection.
In the continue framework of its products, Franklin France shall be entitled to modify specifications without notice

FRANKLIN FRANCE