

# DUVAL MESSIEN

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## Multitester for Satelit<sup>®</sup> 3



### Your multitester solution for your Satelit<sup>®</sup> 3

In accordance with NFC 17 102 standard and regulations in force, lightning protection installations should be checked regularly.

These checks are initials, during the installation, and periodicals according to the technical studies and applicable standards to the different sites.

It is also recommended to do functioning tests after each lightning strike.

To do these tests, **Satelit<sup>®</sup> 3** proposes several tests solutions:

- Wired tester which can be done, either dismantling the lightning rod, either using the test perch (TESTPER).
- Remote tester (TESTS3 N) « mono » lightning rod for Satelit<sup>®</sup> 3 avoids dismantling the lightning rod – best solution for lightning rods installed at big height or/and not easily accessible.
- Remote tester (TESTS3MULTI) « several lightning rods » for **Satelit<sup>®</sup> 3**: allows to use only one test system for several lightning rods.

#### Functional principles:

The advantages of the several lightning rods remote tester for Satelit<sup>®</sup> 3 are numerous:

- According to site configurations, no need to access on the roof.
- Possibility to do the check report directly with the « Pack », which includes the computer.
- No need to have several remote testers; very useful solutions for sites with several ESE.
- Adapted solution for (APAVE, SOCOTEC,)
- A test which checks numerous functioning points of the lightning rod (**not only the communication or the electrical continuity**).
- Solution easily transportable.
- The « pack » computer can be used for other applications, can be connected to internet (the check report can be sent immediately,...).



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## Functional principle

The LMS software is installed in the computer at the factory – the serial numbers can (upon request) be programmed before the complete pack shipping.

Thanks to the **Diag Sat** box connected to the computer, the software will collect lightning rods data installed on the site (each lightning rod has a serial number which allows to be tested individually).

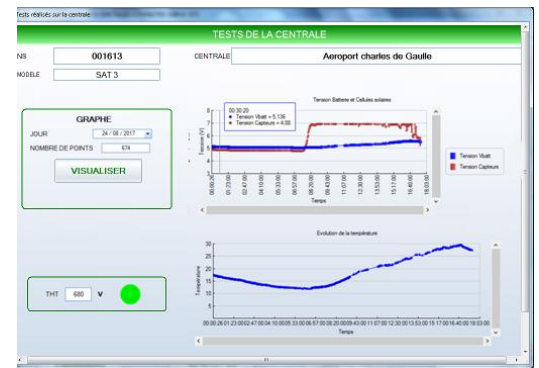
The communication between the (**Diag Sat**) box and the **Satelit@3 ESE** is done by radio communication frequency (433 Mhz). The maximum distance between this box and the lightning rod to allow the data collection is around 100 meters in free field.

Pressing the « TEST » button of the LMS MULTI **SAT3** software, the system will check the good functioning of each lightning rod. this operation consists in sending a current (very low) which will simulate a lightning strike.

During this action, the **SAT3** system will do into action and the operator will be able to be sure of the good functioning.

This test will allow to check:

- The voltage at the terminals of the capacitor
- The voltage at the terminals of the battery
- The good functioning of the solar panels
- The electrical continuity
- The temperature of **Satelit @3**



Reference :

**TESTS3MULTI**

Use : Initial checks, complete checks, internal controls... of the **SATELIT@3**, new generation.

Functioning mode : Radio communication in 433 MHz / FM

Accessories provided in the pack : PACK => RJ45 cable+ USB supply + Tj45 adapter->USB + LMS MULTI 2D software+ **Diag Sat** + laptop



## The « multitester pack » of the **Satelit@3**

The TESTER allows to communicate with the lightning rod associated in factory, at a distance of **100 m** in free field.

The tester is provided with a 9V PP3 battery of type 6LR61 or equivalent (LF22, LR22, 6LF22, MN1604), no plugged in.

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