

Storm detector STORMDETEC™

Anticipate to prevent



KEY ADVANTAGES

The advanced detection of storms provided by STORMDETEC™ allows giving enough time to implement procedures and means of protection to limit

Risks for people;

Destructions, production issues and economical losses.

Important anticipation of a storm arrival:

Distance of detection up to 30 kilometers.

Time anticipation up to 20 minutes.

Adjustable and progressive device:

STORMDETEC™ can be connected to other devices (sound alarms, warning lights,...).

Option for remote control:

Thanks to its easy and userfriendly software WinStormdetec™.

STORMDETEC™ is a storm detector with mill field of new generation for professional use, patented, which measures in real time the variations of the electrostatic field determining the high probability of an imminent storm with a local risk of thunderstorm.



Robust, reliable, precise,
adjustable and progressive



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Description of STORMDETEC™

- **Mechanical features**

Head of Measure TMC

Diameter: 185mm

Height: 165mm

Weight: 2,8 kg

Waterproofing: IP54 (waterproof to streaming)

Control and power supply box CCA

Length: 390 mm

Width: 200 mm

Depth: 115 mm

Weight: 9,5 kg (emergency battery included)

Control and power supply box sealing: IP33 indoor use

- **Electrical features**

Mains supply voltage:

220V AC/50-60Hz or 110V AC/50-60Hz

Protection with fuse: 1,25 amperes in 220V and 2,5 amperes in 110V

Power consumption: 80 W (active heating)

Power consumption in normal use: 20W

Built in battery backup: lead battery, waterproof, with maintenance-free 12 volts, 12A/h

Low battery charge limit protection: shutdown when battery expires, automatic reset on return of mains power

Autonomy: 10 hours (energy economy program)

- **Measurement Signals**

RS232 output: delivers the field measurement signal, levels 1, 2 and 3 alarms and the fault alarm

Baud rate: 19,200.

Optionally: RJ45, TCP-IP (pseudo modem) protocol providing the same signals as the RS232.

Relay, dry contact (idle and triggered):

Relay for level 1, 2, 3: 250V/5A

Relay for failure alarm: PE5 250V/5A

Relay for external indication use

PE4 250V/5A

Relais: Contact sec (repos et travail)

Why installing STORMDETEC™?

Thanks to STORMDETEC™ the early detection of storms formation and their evolution is a complementary mean to anticipate thunderstorms, in addition to protection devices against direct and indirect impacts of lightning for installation and equipment (lightning conductors and overvoltage products).

STORMDETEC™ is a specific device to anticipate thunderstorms; part of a global protection solution, but in any case will replace a lightning conductor.

STORMDETEC™ provides real time measures of the atmospheric activity.

It gives reliable, immediate and precise information when a storm is creating or approaching. It allows implementing safety procedures to avoid accidents, human/economical losses and ensure the most important services supply.

You have a total control of collected data and information.

Thanks to WinSTORMDETEC™ software and its remote control option you can analyze data and main tendencies to better anticipate storm risk.

With its great cost/reliability/relevancy ratio, thanks to its warning alarm system, its adaptability and the possibility of network connection, STORMDETEC™ is a unique tool on the market of early storm detection.



STORMDETEC™ has been especially developed to answer customers' needs from every field of activity. It is very useful to anticipate storm risk and ensure:

- People safety in open areas: construction sites, sport fields or open area activities, any people meeting places...
- Infrastructures protection: harbors, airports, railways, specific roads and motorways...
- Protection of highly sensitive goods: computer systems, electrical or electronic systems, alarms-, safety- or emergency systems.
- Prevention of working risks.
- Limitation of operational and industrial process losses...
- Basic needs continuity: energy distribution, telecom, emergency or sanitary services...
- Limitation of accident risks due to hazardous products (explosive products, radioactive or ignitable products, toxics...).
- Civil and environmental protection (forests, parks...).

Why installing STORMDETEC™?

- ✓ To reduce **economic losses**
- ✓ To protect **human beings**
- ✓ To protect **installations**



Ensure people safety in open areas : golf courses, playgrounds, schools, construction sites, important meeting points.



Protect main infrastructure : harbors, airports, motorways, railways...



Prevent industrial losses



Reduce accident risk on working sites



Prevent industrial accident risk



Ensure basic needs continuity: Energy distribution, telecom, emergency services.



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Why installing STORMDETEC™?



Protect highly sensitive goods:
computer systems, electrical or
electronic systems, alarms-,
safety- or emergency systems.



Civil and environmental protection
(forests, parks...)



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STORMDETEC™, A NEW AND RELIABLE DEVICE...

STORMDETEC™ other features

- **Use conditions**

Head of measure TMC

Temperature: from - 35°C to + 55°C
Humidity level up to 100%

Control and power supply box CCA

Temperature: from -5°C to + 45°C
Humidity level up to 80%
Network operation: optional

- **Guarantee**

STORMDETEC™ is guaranteed one year parts and labor at the factory for use in compliance with the technical manual supplied with the device.

A quality control certificate is provided with STORMDETEC™.

How does STORMDETEC™ work ?



Control and power supply box CCA



Head of measure TMC

Control and power supply box CCA

1- A screen showing real time information (of which electrostatic field level) and the options that can be defined (via a pull-down menu).

2- A klaxon and its sound that can be defined.

3- A set of alarm signs:

-Level 1: Storm in the distance
Local storm tendency

-Level 2: Approaching storm
Local storm developing

-Level 3: Storm in progress
Imminent probability of lightning strike

4- A set of command to control and manage parameters.

Head of measure

1- Capacity to measure the electrostatic fields of standardized storm: 0 to +/- 200 kV/m

2- TMC unit electrostatic field measurement range: 0 to +/- 600 kV/m

3- Resolution: 1V/m

4- Sensibility : 0,3 V/m



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STORMDETEC™, A NEW AND RELIABLE DEVICE...

STORMDETEC™ original kit includes:

- The electrostatic field head of measure (TMC)
- The control and power supply box (CCA)
- A 20-meter long reinforced cable, connection interface between the TMC and CCA (on demand a 100-meter long cable can be provided in case of needs).
- A kit of accessories: fixing screws with corresponding raw plug, clamping collars, fuse and a 6-pan hexagonal key.

With the "remote control by computer" the kit also includes:

- A CD ROM: WinSTORMDETEC™ control software
- A 5-meter long reinforced cable: interface between the CCA and the computer. RS 232 connection.

Example of STORMDETEC™ installation

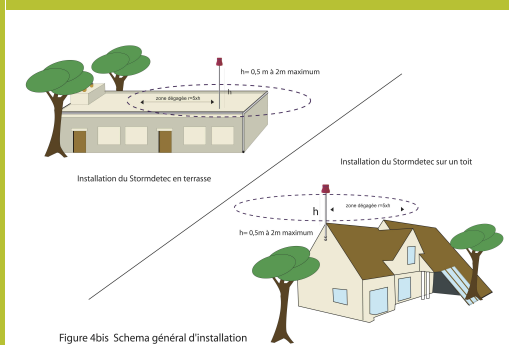


Figure 4bis: Schema général d'installation

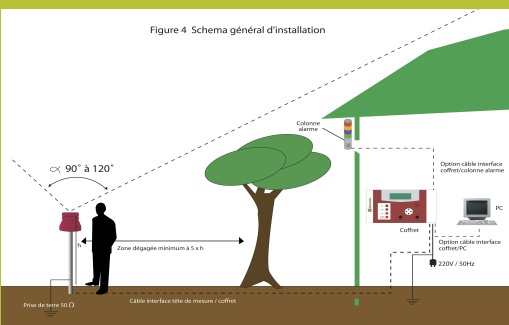


Figure 4: Schema général d'installation

STORMDETEC™: An easy to install device

Easy to install and implement STORMDETEC™ is fully adjustable to fit with user's operational and safety policies.

The head of measure TMC can be installed either on the ground or on the roof, as soon as it complies with the installation guidelines described in the technical manual supplied with the device.

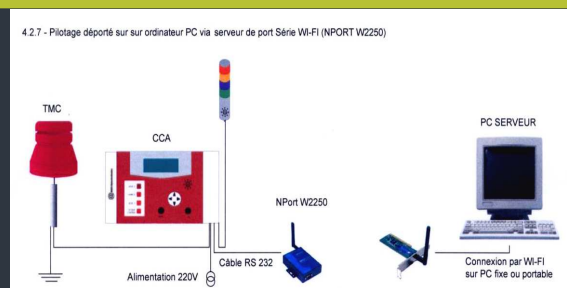
The head of measure TMC has to be positioned towards the sky for a electrostatic field measurement of the atmospheric layer close to the ground with no perturbation.

The main principle of STORMDETEC™ is to measure the current with 12 electrodes exposed and hidden from the electrostatic field in turns by a rotating block.

To improve product's lifetime motor speed is reduced in good weather conditions (2000 turns/minute) and raised in case of electrostatic field increase (up to 3500 turns/minute).

STORMDETEC™ can be remotely controlled via a computer and combined with specific devices in case of needs.

Example: STORMDETEC™ combined with an alarm – the whole installation remotely controlled by a computer



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Contact

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