

Study – Prevention – Protection - Lightning



The lightning strike counter

The lightning strike counter **Compt@ir®** consists of a 6 digits display. Each lightning strike is recorded when it comes through by incrementing one unit (the rightmost number).

Watertight (IP65), robust and reliable, it operates without any power supply and records positive or negative lightning strikes.

The lightning strike counter displays the total number of lightning strikes having struck the Outside Protection against Lightning Installation (OPLI).

It is necessary to regularly watch over the display for a good follow-up of the installation. The lightning strike counter is essential for the good maintenance of the OPLI (cf. NFC 17-102 : a checking shall be done after each lightning strike).

This regular monitoring doesn't require a travel with Contact@ir+Rout@ir option. On top of that, you will be warned in real time in case of lightning strike event.)

It can be set up and works on any type of existing downward conductor (flat, round, ...) thanks to its universal fastenings. **Compt@ir®** lightning strike counters are compliant with the standards in force (NFC 17-102, NF EN 50164-6).



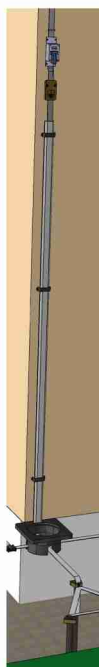
Height	14.50 cm
Width	5.50 cm
Depth	5.50 cm
Weight	0.285 kg

LIFETIME WARRANTY*



Dimensions

Installation

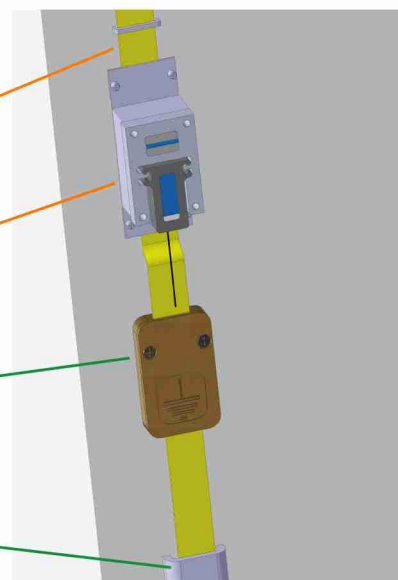


**22041 :
Downward conductor**

**43603 :
Lightning strike counter**

**43604 :
Control seal**

**43605 :
Protective sleeve**



"If the installation is equipped with a lightning strike counter, it is appropriate for the latter to be installed on the most direct downward conductor and to be preferably located right above the control seal."
NFC 17-102 – September 2011, (art. 5.3.8).



Study – Prevention – Protection – Lightning

REMINDER

An outside protection against lightning with a lightning rod must be checked every year and after each lightning strike to ensure its good working order. Source NFC 17-102 – September 2011.

Remote communication option



Compt@ir® lightning strike counters are supplied as standard with a plug to connect the **Contact@ir®** system.

A **Contact@ir®** emitter can be optionnally fitted on each **Compt@ir®** lightning strike counter.

Then the **Contact@ir®** emitter permanently communicates the **Contact@ir®** lightning strike counter operating status as well as its communication reliability. This communication occurs without any physical link.



Servicing and maintenance of your installation



If used with the Rout@ir option, when lightning strikes the installation, **Compt@ir®** records and transmits the event by sending an email warning

Once the lightning strike detected, a normative check will have to be performed in accordance with the articles 8.2 to 8.5 of the NFC 17-102 standard.

This check aims at ensuring the good order of the lightning protection installation and doing the necessary repairs of the installation.

Thanks to **Compt@ir®** and to the "lightning strike" warning, the lightning protection installation is being permanently watched over.



Whatever your installation

A lightning protection has got an important service life. Thus, any installation requires a follow-up, checkings and regular maintenance to ensure its efficiency.

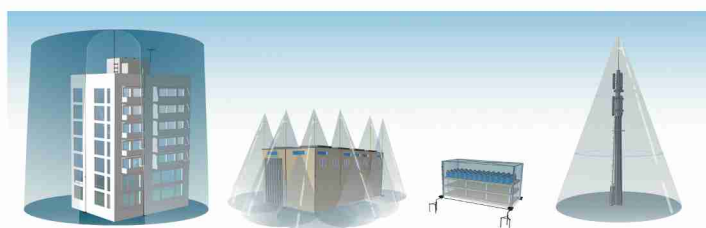
Contact@ir® system is a **LPS France** exclusive

If used with the **Rout@ir®** option, it enables you :

- ✓ To make a remote diagnosis of your installation at any time,
- ✓ To receive an in-real-time warning when your installation is thunderstruck,
- ✓ To know what was the intensity of the lightning strike, and thus know what type of check of your installation has to be done if need be.

The lightning strike counter **Compt@ir®** is universal and can easily be added to your lightning protection installation, whatever its type, its trademark and its age.

Once associated with a **Rout@ir®**, it enables you to benefit from the **Contact@ir®** system advantages without modifying your installation.



- ✓ **Standards respected**
- ✓ **Warranties preserved**
- ✓ **Maintenance simplified**
- ✓ **Security ensured**





Contact@ir® System



www.lpsfr.com

Study – Prevention – Protection – Lightning

Wireless communication solution



A **Contact@ir®** emitter can be optionally fitted on each **Contact@ir Ready** product (**Paraton@ir®** range and **Compt@ir®** lightning strike counters).

Then the **Contact@ir®** emitter permanently communicates the operating status of the **Contact@ir Ready®** product as well as its communication liability. The communication is ensured by radio, without any physical link..

If used with the **Rout@ir®** option, it transmits an in-real-time warning when a lightning strike is picked up by the **Contact@ir Ready®** product and records it.

Efficient, reliable and easy-to-use, **Contact@ir®** system facilitates the control and maintenance of your lightning protection installation. **Contact@ir®** system favours lightning risk prevention.



REMINDER

An outside protection against lightning with a lightning rod must be checked every year and after each lightning strike to ensure its good working order. Source NFC 17-102 – September 2011.

The emitter

Contact@ir® emitter is supplied by a photovoltaic cell that ensures its autonomy.

The technology of this cell enables to get the system charged even in case of low luminosity and to ensure a 24-hour communication.

Communication is possible with a broadcast range from 30 up to 300m depending on the receiver, its position and environment.



Contact@ir® emitter can be fitted on the **Contact@ir Ready®** product during the assembly or at any time during the lifetime of the installation. This operation is simple, rapid, easy and has no effect on the protection efficiency.

For a perfect aesthetic, **Paraton@ir®** and **Contact@ir®** are available in eight colors.

Once the **Contact@ir Ready®** product ((**Paraton@ir®** or **Compt@ir®**) installed with its emitter plugged in, the product and its emitter must be registered on the server www.contact-platform.com.

Reception of information

The content of the information you receive and the type of receipt (local or remote) depend on the choice of receiver. There is two existing receivers : **Dongl@ir®** and **Rout@ir®**.

EQUIPEMENT					INFORMATION			
EMITTER	RECEIVER	RECEPTION (1)	READING		IDENTIFICATION (2)	DIAGNOSIS (3)	LIGHTNING WARNING (4)	INTENSITY
		LOCAL	PC OR MAC	Contact@ir® SOFT SOFTWARE				
			PC OR MAC ANDROID MOBILE OR PAD	Contact@ir® SOFT APP				
		REMOTE	ANY TYPE OF EQUIPMENT WITH AN INTERNET CONNECTION	SERVER www.contact-platform.com				

(1) : For a local reception, an on-site trip is necessary to collect the datas, Rout@ir enables a remote reception and consultation of datas thanks to an internet connection.

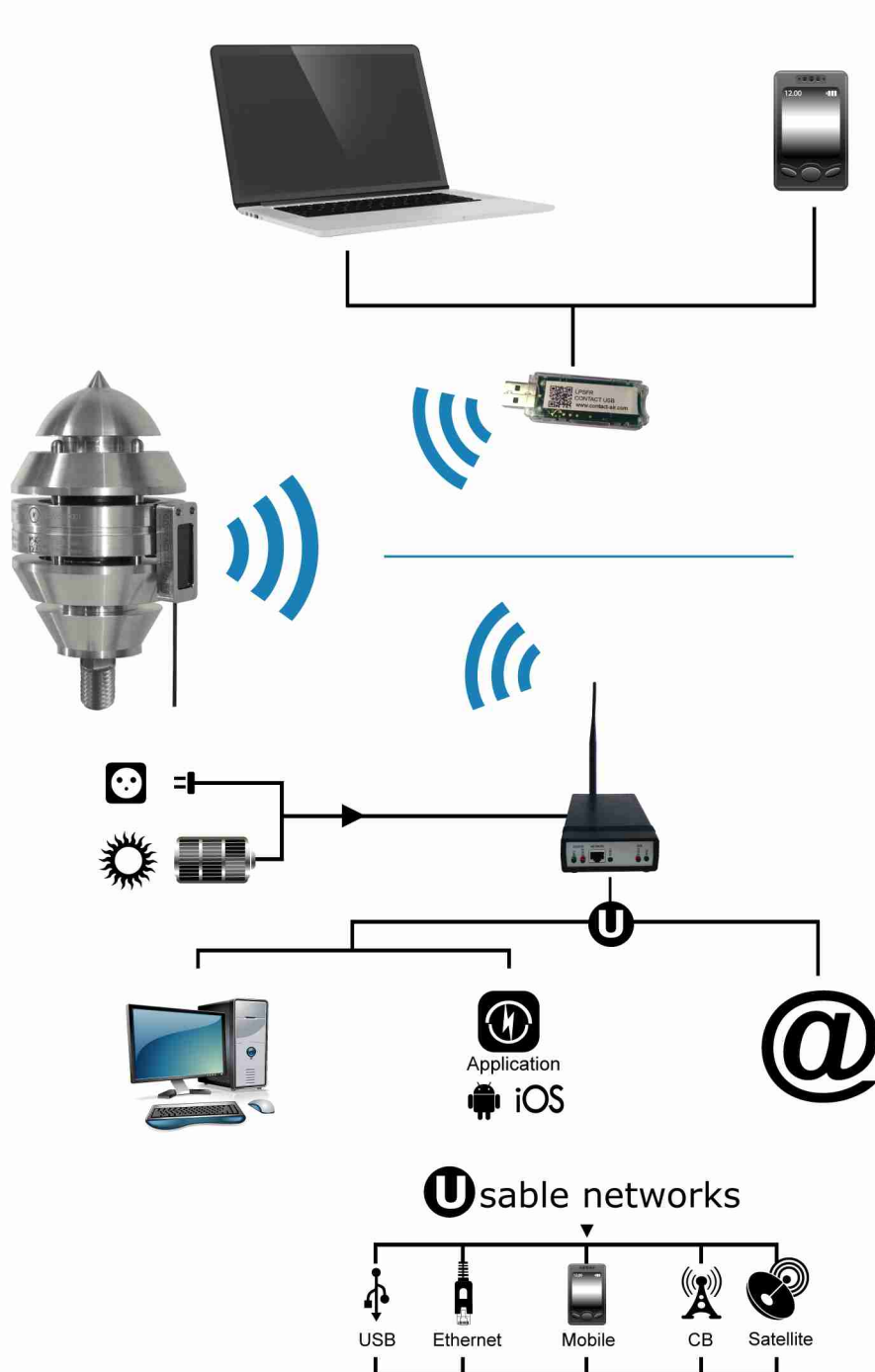
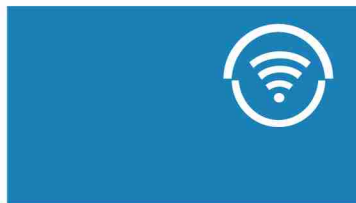
(2) : Shows the serial number, the type and the colour of the lightning rod or the serial number of the lightning strike counter, as well as the serial number of the emitter and potential datas entered by the user about the identified two linked products.

(3) : Indicates whether the **Contact@ir Ready®** product and the identified emitter are in good working order or not.

(4) : Records the lightning strikes received by the identified **Contact@ir Ready®** product, creates a user accessible history, and sends him an in-real-time warning email.



LIGHTNING PROTECTION SYSTEMS FRANCE
BP 80055 - F-33460 MARGAUX



With Dongl@ir®
Local reception

**IDENTIFICATION
+
DIAGNOSIS**

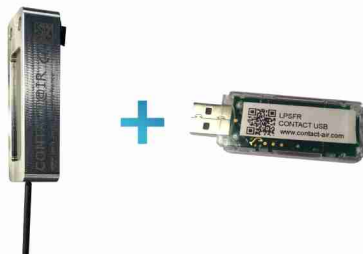


With Rout@ir®
Remote reception

**IDENTIFICATION
+
DIAGNOSIS
+
IN-REAL-TIME
WARNING
+
LIGHTNING INTENSITY
LEVEL**



Contact@ir® System with Dongl@ir®



www.lpsfr.com

Study – Prevention – Protection – Lightning

Maintenance and servicing requirements to be met



An outside protection against lightning with a lightning rod must be checked every year and after each lightning strike to ensure its good working order.
Source NFC 17-102 – September 2011, (art. 8.2).

Maintenance and servicing of your lightning protection installation are also necessary to preserve your manufacturer's and installer's warranties.

To ensure a total security, you must be certain of its efficiency at any time.

Contact@ir® system is an exclusive solution proposed by LPS France to meet normative requirements, preserve your warranties and ensure your security throughout the lifetime of your lightning protection installation.

Why use Dongl@ir® ?

Contact@ir® system, if used with **Dongl@ir®** receiver, enables you to check the good working order of your product.

The transmission of data occurs by radio waves, without any physical link between the **Contact@ir®** emitter and the **Dongl@ir®** receiver.

In this way, **Dongl@ir®** facilitates and makes safer the diagnosis of a product often difficult to access, the intervening person not being constrained any more to get into a **risky situation to reach it**.

Dongl@ir® is a specific mean of diagnosis. It has to be used nearby the product (80 meters maximum).

Within a few seconds, your product is identified and the result of its diagnosis appears on your screen. You then immediately know if an intervention is necessary on your installation or not.

A reliable and securing device.



What are the necessary equipments ?



The Contact@ir® emitter

Has to be connected to the **Contact@ir Ready®** product the diagnosis of which you wish to obtain, That is :



The
Paraton@ir®
range



The
Compt@ir®
range

The **Contact@ir®** emitter can be fitted on the **Contact@ir Ready®** product during the assembly or at any time during the life time of the installation.



Dongl@ir®

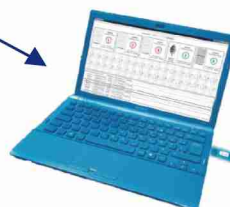
Is provided in the form of an USB key and is plugged :



In your pad or Android mobile with a microUSB adapter.

In that case, the information will be read on the application **Contact@ir App®**.

A single **Dongl@ir®** enables to carry out the identification and the diagnosis of all the **Contact@ir Ready®** products the rights of which you hold.



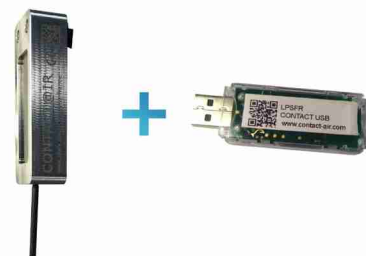
In one of your PC or MAC USB port. In that case, the information will be read on software **Contact@ir Soft®**.





www.lpsfr.com

Contact@ir® System with Dongl@ir®



Study — Prevention — Protection — Lightning

When carry out a diagnosis with Dongl@ir® ? —

With **Dongl@ir®**, you can carry out a diagnosis when you are located near your installation to check its reliability.

The circumstances requiring the checking of your lightning protection installation are listed in the NFC 17-102 standard text in the article 8.2 :

- Periodically in order to be able to anticipate and forestall the natural wear of your installation,
- After a thunderstorm or any other climatic phenomenon potentially harmful for your lightning protection installation,
- Each time the protected structure is modified or repaired.

A clearly defined use

Which information shall I obtain with Dongl@ir® ? —

Whether you use **Contact@ir Soft®** or **Contact@ir App®**, you will obtain the following information :

Identification :

- The **Compt@ir®** or **Paraton@ir®** serial number,
- The type and colour of the **Paraton@ir®**,
- The emitter serial number,
- Potential notes previously entered.

Diagnostic:

- Quality of communication,
- Product integrity,
- Product working order

History :

- Chronology of previous diagnosis by product,
- Diagnosis results,
- Previous users' comments.

Device serial number	Revision time	Revision date	Status	Connection	Protection
00000001	11/06/2012 12:13:36	45 dBm	Not connected	Not connected	Not connected
00000002	11/06/2012 12:13:36	45 dBm	Not connected	Not connected	Not connected
00000003	11/06/2012 12:13:36	45 dBm	Not connected	Not connected	Not connected
00000004	11/06/2012 12:13:36	45 dBm	Not connected	Not connected	Not connected
00000005	11/06/2012 12:13:36	45 dBm	Not connected	Not connected	Not connected
00000006	11/06/2012 12:13:36	45 dBm	Not connected	Not connected	Not connected
00000007	11/06/2012 12:13:36	45 dBm	Not connected	Not connected	Not connected
00000008	11/06/2012 12:13:36	45 dBm	Not connected	Not connected	Not connected
00000009	11/06/2012 12:13:36	45 dBm	Not connected	Not connected	Not connected
00000010	11/06/2012 12:13:36	45 dBm	Not connected	Not connected	Not connected

Relevant and clear information

All information collected during the diagnostics are automatically dated, recorded and chronologically classified.

This information is necessary to draw up documents relative to the carrying out, the checking and the maintenance of your installation.

Those documents are imposed by the NFC 17-102 standard (art. 8.1 to 8.7). To learn more, connect to www.lpsfr.com.

What do I do if the diagnosis reveals a critical information ?

- ✓ **Standards respected**
- ✓ **Warranties preserved**
- ✓ **Maintenance simplified**
- ✓ **Security ensured**

In this case, it is imperative that a complete check of your installation should be carried out.

The complete checking procedure can be found in the NFC 17-102 standard (art. 8.5 and 8.6) and is resumed in the FT-LPSFR-11 specification sheet. This check is a prerequisite to the preservation of your warranties.

By calling upon a LPS France licensed agent, you are sure that the checking procedure is respected and that the appropriate measures are taken.



LIGHTNING PROTECTION SYSTEMS FRANCE
BP 80055 - F-33460 MARGAUX

Contact@ir[®] System with Rout@ir[®]



www.lpsfr.com

Study – Prevention – Protection – Lightning

Maintenance and servicing requirements to be met



An outside protection against lightning with a lightning rod must be checked every year and after each lightning strike to ensure its good working order.
Source NFC 17-102 – September 2011, (art. 8.2).

Maintenance and servicing of your lightning protection installation are also necessary to preserve your manufacturer's and installer's warranties.

To ensure a total security, you must be certain of its efficiency at any time.

Contact@ir[®] system is an exclusive solution proposed by **LPS France** to meet normative requirements, preserve your warranties and ensure your security throughout the lifetime of your lightning protection installation.

Why use Rout@ir[®] ?

Contact@ir[®] system, if used with **Rout@ir[®]** receiver, enables you to check the good working order of your product remotely. If one of your product is struck by lightning, you immediatly receive a warning. **Une surveillance continue, à distance**

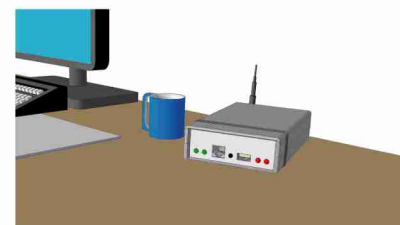
You are given the lightning strike intensity level on a scale from 1 to 3.

It is thus possible to know which type of checking has to be done.

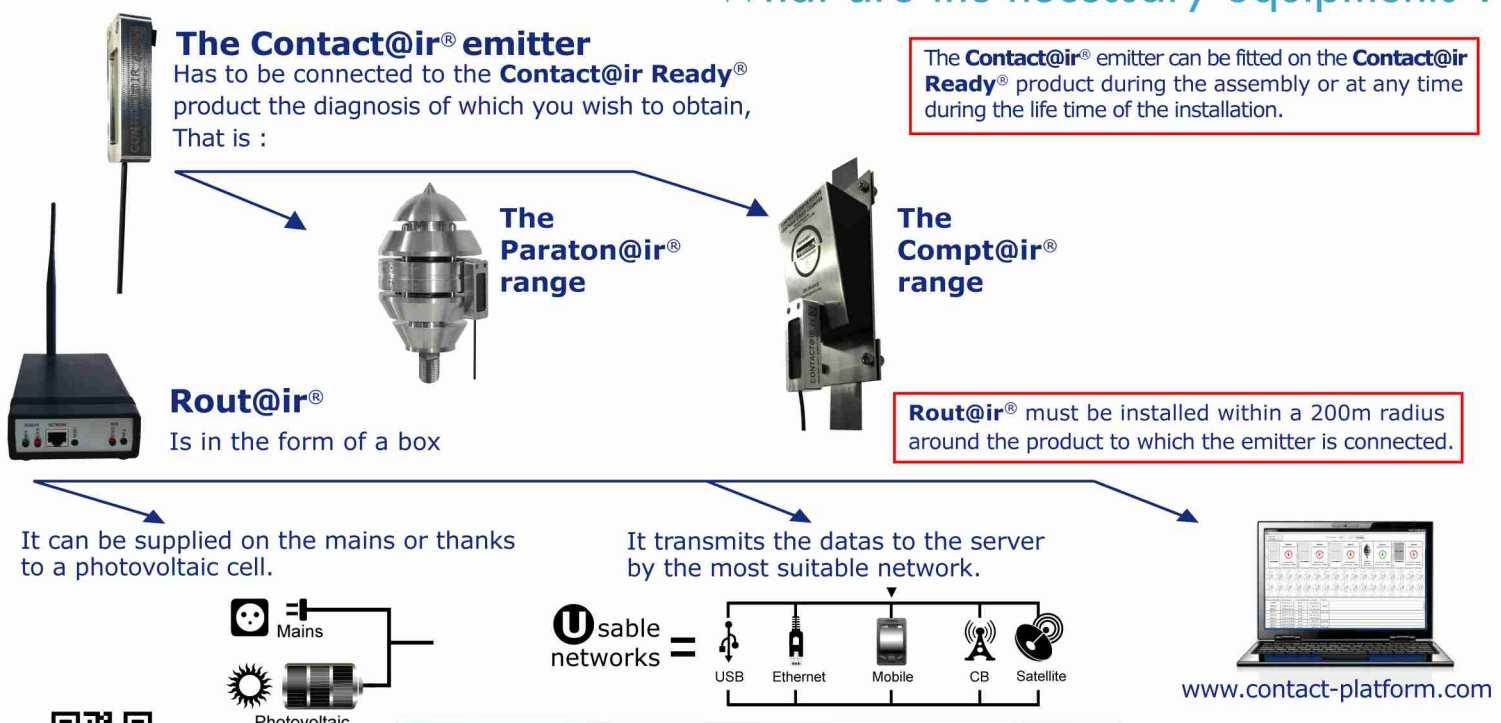
Your products equiped with a **Contact@ir[®]** emitter permanently communicates by radio waves with your nearby-located **Rout@ir[®]**.

Datas collected by Rout@ir are constantly transmitted to the server on which they are recorded and dated without any intervention on your part.

The multiplicity of usable networks for the data transmission makes its use possible even in the most isolated places. Datas can be remotely accessed to, from any appliance connected to the internet. At any time and from anywhere, you can peruse the status of you installations.



What are the necessary equipments ?



LIGHTNING PROTECTION SYSTEMS FRANCE
BP 80055 - F-33460 MARGAUX



www.lpsfr.com

Contact@ir[®] System with Rout@ir[®]



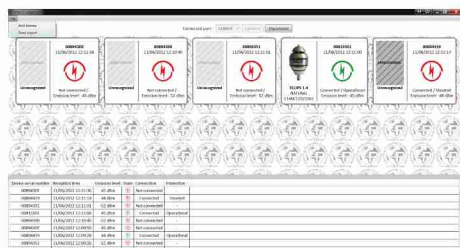
Study – Prevention – Protection – Lightning

Which information shall I obtain with Rout@ir[®] ?

On the www.contact-platform.com server, you will obtain the following information :

Identification :

- The **Compt@ir[®]** or **Paraton@ir[®]** serial number,
- The type and colour of the **Paraton@ir[®]**,
- The emitter serial number,
- Potential notes previously entered.



Diagnosis:

- Quality of communication,
- Product integrity,
- Product working order

History :

- Lightning strike history
- Chronology of previous diagnosis by product,
- Diagnosis results,
- Previous users' comments.

- + Lightning strike alert
- + Lightning strike intensity
- + Maintenance level

All information continuously collected by **Rout@ir[®]** are automatically transmitted to the server, dated, recorded and chronologically classified. This information is necessary to draw up documents relative to the carrying out, the checking and the maintenance of your installation. Those documents are imposed by the NFC 17-102 standard (art. 8.1 to 8.7)

To learn more, connect to www.lpsfr.com.

Relevant and clear information

What do I do if I receive a lightning strike warning ?

Contact@ir[®] system used with **Rout@ir[®]** transmits an in-real-time warning when the protection installation is struck by lightning.

The NFC 17-102 standard imposes a check of your lightning protection installation each time the protected structure is struck by lightning (art. 8.2).

This measure aims at ensuring the efficiency of your protection installation without any interruption. For this reason, simply receiving a lightning strike warning must lead you to check the integrity and the good working order of your product on the www.contact-platform.com server.

Rout@ir[®] also enables you to know the intensity of the lightning strike picked up by your product on a scale from 1 to 3.

This feature, as the whole of Contact@ir system, is a **LPS France** exclusive.

The intensity of the lightning strike picked up by your product and the result of its diagnosis assist in determining whether a visual, normal or a complete check of the installation is necessary (cf. NFC 17-102 standard, art. 8.2 to 8.6), as well as the urgency level of the action to be taken.



**A performant
decision-support
tool.**

Thanks to **Rout@ir[®]**, you save time and avoid useless expenditure while ensuring the efficiency of your installation with more targeted actions.

What other requirements is Rout@ir[®] meeting ?

According to the NFC 17-102 standard (art. 8.2) your lightning protection installation must also be checked :

- Periodically in order to be able to anticipate and forestall the natural wear of your installation,
- Each time the protected structure is modified or repaired.

With **Rout@ir[®]**, the historization of lightning strike warnings favours the prevention of use-related damage on the installation and you can rapidly carry out a diagnosis wherever you are.

If the diagnosis reveals a critical information, your installation must be the object of a visual, normal, or a complete check as appropriate (cf. NFC 17-102 standard, art. 8.5 and 8.6). This check is a prerequisite to preserving your warranties.

By calling upon a LPS France licensed agent, you are sure that the checking procedure is respected and that the appropriate measures are taken.

- ✓ Standards respected
- ✓ Warranties preserved
- ✓ Maintenance simplified
- ✓ Security ensured



LIGHTNING PROTECTION SYSTEMS FRANCE
BP 80055 - F-33460 MARGAUX