

PREVECTRON 3[®] Connect



IoT

CONNECTED

Smart Effective Lightning
Protection Technology

PREVECTRON 3[®] Connect

Cutting Edge Technology

OptiMax
Technology

Optimized
Performance

The patented OptiMAX technology provides the PREVECTRON 3 air terminal consistent repeatable performance. This innovative system provides a 40% reduction over the minimum standard deviation for initiation times in high voltage laboratory tests. This translates to a reliable upward streamer development process and significant improvement in lightning protection system performance and reliability.



Launched in 2015, the PREVECTRON 3[®] was the first Early Streamer Emission (ESE) air terminal to receive UL Certification.

In conjunction with the LiRi research center and scientific partnerships in several countries INDELEC continues to conduct stringent product test campaigns. For example, the PREVECTRON 3[®] is the first ESE air terminal successfully subjected to over 200,000 amps in laboratory tests.

PREVECTRON 3

World's Most Accredited ESE Air Terminal

- Certified to fully comply with NF C 17-102 Annex C testing (UL and Bureau Veritas)
- UNICAMP certified for 250kA current withstand.
- CE mark for compliance with electromagnetic interference (received/transmitted)
- RTN certification for use in Dangerous Industrial Environments.



PREVECTRON³ Connect

IoT CONNECTIVITY

(IoT = INTERNET OF THINGS)



The application of IoT technology has spread quickly as a means to connect industrial components to the internet.

Users have remote access to their equipment to monitor conditions and operational status.

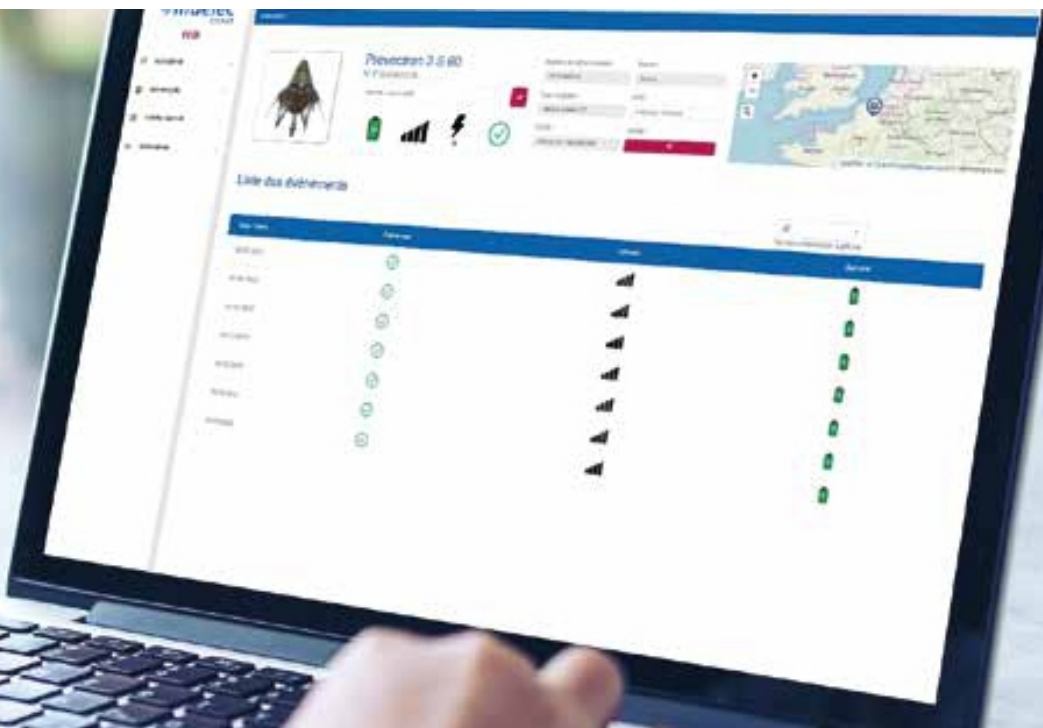


www.indelec-connect.com

The Lightning Innovation & Research Institute selected M2M (Machine to Machine) technology and widely available GSM/GPRS Quad-Band telecom networks for the PREVECTRON[®] 3 connect to communicate its status to end users via a dedicated secure web portal (www.INDELEC-connect.com).

Air terminal condition, battery status, and number of lightning strikes are available without the installation of transmitters, network connections, or onsite server resources. As a pure plug and play solution, the PREVECTRON[®] 3 connect automatically logs on to the Internet as soon as it is installed on site.

The INDELEC-connect.com website is compatible with most browsers and devices for users to access their installed PREVECTRON[®] 3 connect air terminals.



PREVECTRON 3[®] Connect

Prototypes installed on four continents in various climates and environments have been monitored since installation as part of the Prevectron 3[®] Connect development process.

- France (12 sites)
- Egypt: Petrochemical Site
- Congo RD: Lodge
- India: WTC Bangalore
- United States: Denver Colorado
- Asia: Cambodia High Rise Condominium
- Russia: St Petersburg
- Mexico: Office Building
- Brazil: Sao Paulo Residential Building



2 Year ISO 9001 Certified Research and Development Process



Communication



Waterproofing



Heat Cycles



Cold Cycles



Charge/
Discharge Cycles



Endurance



- UV exposure
- Salt mist exposure
- SO² sulfuric environment exposure
- Pendulum impact test
- IP Tests (ingress protection)
- 10/350μs waveform current withstand tests (1kA to 100kA)
- Marking test
- Radiated radio-frequency emission tests in compliance with NF EN 301489-17 and NF EN 61326-1 (Class B) standards.
- Radiated radio-frequency electromagnetic field immunity in compliance with NF EN 61000-4-3
- Electrostatic discharge immunity test in compliance with NF EN 61000-4-2

The lightning strike counter in the IoT module is the only strike counter to be certified compliant to EN 62 561-6