First -Power Lightning & Surge Protection Ltd



Cirprotec

Specialists in **Lightning** and **Surge Protection**





COMPANY PROFILE

CPT Cirprotec is a pioneering company involved in the design and manufacture of lightning and surge protection devices, and is a leading international player in this sector. CPT does also provide consulting services and customised solutions.

CPT Cirprotec belongs to a holding company specialized in technology, which gives it access to several design and manufacturing centres and laboratory facilities. Its head office is in Terrassa (near Barcelona), with over 6000 sqm including offices, labs and production facilities.

CPT has an extensive network of branch offices both in Spain and abroad and is present in over 60 countries.

SPECIALISTS IN LIGHTNING AND SURGE **PROTECTION**

PIONEERS IN PROTECTION

PRODUCTS AND SERVICES

CPT has a wide range of products to provide solutions to specific needs in the field of lightning and surge protection. In striving to offer the best service, Cirprotec complements its product range with design, consulting and training services, providing customers with a complete solution.

All CPT products are manufactured by Cirprotec in accordance with IEC-61643-1, NFC 61-740, BS 6651 & DIN VDE 0675-6.

WIDE RANGE OF SOLUTIONS

ENERGY EFFICIENCY

CPT Cirprotec has strongly committed itself to developing efficient solutions, improving equipment service life and reducing recycling needs. This also avoids unnecessary demand due to early aging.

SPECIALISTS

PROFESSIONAL TRAINING

COMPLETE SOLUTIONS INNOVATION



QUALITY

All CPT product ranges are designed and manufactured by Cirprotec in accordance with international standards such as IEC, EN, NFC, VDE, UNE, UL, IEEE and backed by ISO 9001 quality assurance.

Cirprotec is ISO 9001(2008) certified by BUREAU VERITAS.



OUR QUALITY COMMITMENT

INNOVATION

Even since its inception CPT has experienced strong growth thanks to its innovative spirit and commitment to technological development, as witnessed by the creation of new products which have positioned the company as the technological leader of the sector.

CPT is a company driven by innovation which devotes significant efforts and investments to the development of innovative and high quality products. Early 2006 launched CPT LAB, one of the most important laboratories in the world dedicated to the technology of surge generation. Thanks to this constant commitment to innovation, Cirprotec has become firmly established in the global protection market. It is also present in the various Spanish and international standards committees which deal with lightning and surge protection, with the goal of driving and standardising the sector.

INNOVATION IN OVERVOLTAGE PROTECTION



LABORATORIES

With over 1000 sqm of laboratory space, CPT has the technological capacity which allows to carry out most of the tests needed for the production and verification of electrical equipment, as well as research of phenomena and consequences in the electro-technical field (such as lightning, disturbances and micro power cuts).

All tests carried out in these labs are in accordance with the strictest international standards and directives, including IEC 60871-1, IEC 61643-1, IEC 60076-3 and IEC 60060-1.

CPT LAB IS ONE OF THE MOST IMPORTANT SURGE GENERATION LABS WORLDWIDE

• CPT LAB - HIGH VOLTAGE LABORATORY

The HV Lab enables CPT Cirprotec to research and test all parameters relative to surge protection equipment, as well as generating simulated lightning strikes in real time. These tests enable CPT to guarantee the reliability and efficiency of protection equipment and facilitate the design of new products.

Among other electro-technical tests, the lab generates high impulse currents of up to 190kA with 10/350 μ s and 8/20 μ s waveforms, typical of direct and indirect lightning activity. Impulse voltage tests in 1,2/50 μ s waveform can also be carried out.

Cirprotec does also have labs for specific testing:

• TESTS AND VERIFICATIONS:

Life time test, Combined environmental test, Salt mist corrosion test, IP (Ingress Protection) test, Glow wire test

- ELECTRICAL CALIBRATION
- EMC / EMI:

Electrical Magnetic Compatibility (conducted and radiated)

• METROLOGY:

Metrological test (compliance with MID)

• TRANSFORMERS AND INDUCTANCES



EMC/EMI Laboratory





LIGHTNING AND SURGE PROTECTION

SURGE AND OVERVOLTAGE PROTECTION

Complete range of solutions for protection against Transient and Permanent Overvoltages (TOV):

- **Electrical network:** Transient voltage surge protection (IEC & UL), Permanent Overvoltage (TOV) protection and combined Transient & Permanent (TOV) overvoltage protection.



- **Telecom and Signalling Networks:** Protection of equipment connected to telephone lines and data networks (Ethernet), protection of radiofrequency lines and measurement & control systems.



LIGHTNING PROTECTION

Complete range of solutions for external lightning protection: **E.S.E. Early Streamer Emission** lightning rods, **Faraday** cage and **earthing systems**.



GROUNDING AND INSULATION

Grounding system monitoring: Devices for real-time checking of the grounding installation status, triggering, a warning upon disconnection, deterioration or theft.

Insulation monitoring: Devices for detection of insulation faults in unearthed power supplies: IT and photovoltaic installations (DC).







Insulation Monitoring (ISO-Check)

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www.cirprotec.com

Specialists in comprehensive lightning and overvoltage protection. Specific solutions for all types of application.



Surge Protection



Permanent Overvoltage Protection (TOV)



Overvoltage
Protection for
Signalling Networks



External Lightning Protection



Monitoring of Grounding



Insulation Monitoring



Beacon



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