

TORBAY



**Stand 7 - Manufacturing, Technology & Innovation
conference and exhibition Thursday 18 October 2012**

Based in South Brent, Devon, PD Devices Ltd is a privately owned company, a specialist designer and manufacturer of Surge Protection Products and components and is the only British manufacturer of Metal Oxide Varistors (MOV's).

We supply products and custom solutions to protect against damage from lightning and transient over-voltages, serving a broad range of markets including, Buildings & Construction, Rail Transport, Electrical Power Generation & Networks, Renewable Energy Systems, Telecom & Data Networks, Office & Home Protection, and Defence & Security.

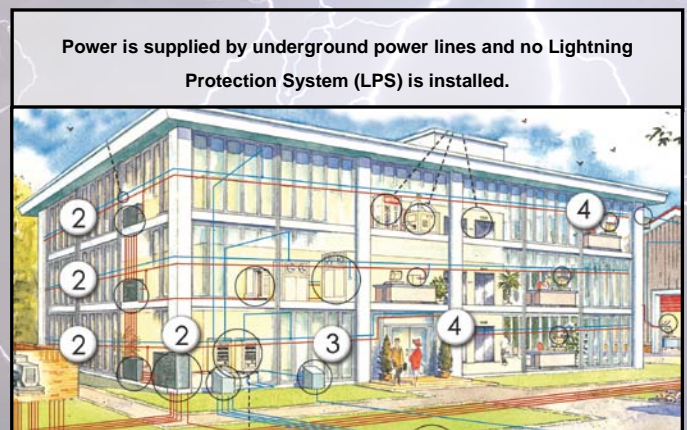
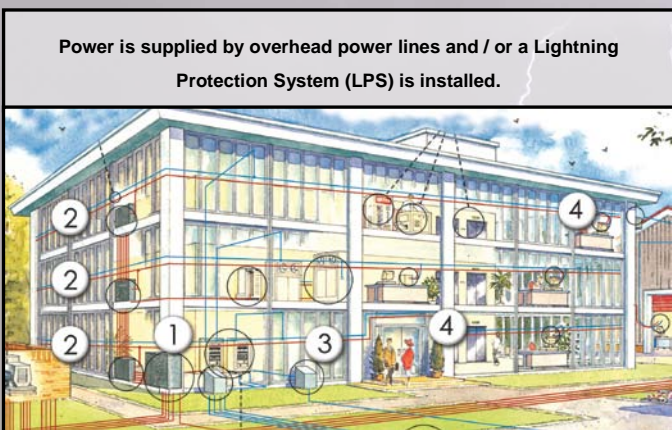
Buildings & Services, Industrial, Commercial, Office, Home, Data / Network & Telecom Systems Protection
Surges or transients can create huge potential losses from corrupted data and software, equipment failure and structural damage caused by the secondary effects of lightning strikes, or the switching of electrical inductive or capacitive loads, for example transformer switching, and factory equipment such as Arc Welders, Lifts, Air Conditioning, Photocopiers and refrigeration equipment.

Most electronic equipment connected to the AC mains supply, telecom or datalines, is at risk from the damaging effects of surges or transient over voltages. £M's of electronic equipment is destroyed within buildings every year by lightning or other surge phenomena.

Our extensive range provides a co-ordinated system for total site protection, and is designed to provide comprehensive protection at a reasonable cost, beginning where Power, Data, and Telecom lines enter a building, through to special devices for extremely sensitive or critical equipment.

Products are designed and manufactured to meet the requirements of BS EN 62305-4, BS EN 61643-11/12, BS EN 61643-21/22 and BS 7671. BS7671 (the IET Wiring Regulations) is the national standard to which all domestic and industrial wiring must conform and the latest issue affects all new installations as of 1st January 2012.

Examples of co-ordinated surge protection in accordance with BS 7671, where:



1. Main LV Switchboard System Protection – Type I, Class I



2. Main / Sub LV Switchboard System Protection – Type II, Class II



3. Main / local Telecom / Data Protection



4. Local Protection Power – Type III, Class III



We offer a wide range of Products & Services including AC & DC Power Traction Arresters, Modules for Home, Office and Telecom Industry, AC & DC Power Distribution Networks & Generators, Electro-Magnetic Pulse Protection for Defence & Security applications and Metal Oxide (MOV) Individual Varistors.

Protection products and components are designed and manufactured to meet National & International Standards & recognition's including UL, CEE, BS, & IEC.

PD DEVICES LTD
Surge & Lightning Protection

Welcome to PD Devices

With over 40 years of experience as a manufacturer of surge arrester elements our product range has continuously expanded and we now supply Surge Protection Components, Arresters and Modules for applications in numerous markets including:

Buildings-Construction, Transport, Electrical Generation-Supply, Office-Home and Defence-Security.

A diverse, worldwide customer platform, supported by local Sales & Distribution organisations has been vital in the development of our global supply capability.

We ensure that all our product designs, test & manufacturing processes and facilities comply with all relevant International Standards, and Qualification Procedures.

We are based in South Brent, Devon, and as the only MOV (Metal Oxide Varistor) manufacturer in the UK we can offer customised solutions and a wide range of operation parameters to suit many different applications.



MOV

What MOV's are and why we use them in surge protection

Description:
An MOV is a bipolar, non linear resistor, with a symmetrical voltage / current characteristic curve, and a resistance value which decreases as the voltage increases.

A semiconducting device which 'clamps' an effective resistance at a specified voltage.

Advantages:
High energy dissipation
Low clamping voltage
Suitable for AC and DC applications
Bipolar operation
Very low leakage current
Fast response time (Typically 5ns)
Relatively inexpensive per Joule

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PD DEVICES LTD
Surge & Lightning Protection

Railway Network Power & Signalling Systems

World Class Surge Protection
A world leader in surge protection

Don't let a lightning strike put a stop to your network.

We offer a specialised range of products designed to address the protection requirements of both above ground and trackside supply, infrastructure and signalling for AC and DC applications.

PDBMA
A range of surge arresters designed for easy mounting in any orientation. This device is capable of dealing with surge currents in excess of 200kA. The high current capability and low residual voltage means that this device is well equipped to offer protection from the effects of direct and indirect lightning and other line disturbances.

DC Traction Arrester
A range of devices to protect DC voltage systems from the effects of rapid transients derived from lightning, switching, mechanical failure and other man made interference. The insulator housing is available in Silicon Rubber or Polymeric EPDM. Due to the arrester's high cantilever and torsional strength it can be used as a support insulator.

Solid State Interlocking
A range of products designed specifically to reduce the failure rate of Trackside Functional Modules (TFM's) during lightning storms, other electrical disturbances and improve the Solid State Interlock (SSI) performance prolonging the service life of the equipment.

Modules are available for data communication protection and cover voltages: 110V, 120V, 140V and 650V, satisfying DC and AC supplies. MOV or SAD and combination technologies are available, offering two stage redundant protection, protector status indication and remote signalling.

Low Voltage Limiter
A range of products at differing operating voltages, for the use in DC Traction Systems, Railways and Trams to divert dangerous voltages to safety during fault conditions, for example as a result of fallen overhead cabling. The devices also offer protection against lightning and other short duration faults.

Sheath Voltage Limiter and System Specific Protectors
Many devices are designed for application specific use to accurately limit the over voltage transferred to susceptible equipment.

Pipelines, datelines, fencing and barriers often run parallel to overhead or underground power transmission lines and dangerous and damaging voltages can be induced as a function of normal operating or fault currents. The sheath voltage limiting devices are bonded between cable sheaths and a ground conductor to mitigate the effects.

FOR MORE INFORMATION CONTACT US: +44 (0) 1364 649248

PD DEVICES LTD
Surge & Lightning Protection

Defence & Security - Electro Magnetic Pulse Protection Modules

We manufacture a wide range of products to protect against the effects of high altitude detonation of nuclear devices. The result of such an event is the generation of Electromagnetic Pulses which will induce a high voltage transient in exposed conductors.

The Electromagnetic Pulses (EMP) can affect several thousands of square kilometres, with a magnitude of tens of kilovolts. This could result in serious damage to insulation, cause breakdown of semiconductors and the consequent malfunction of critical equipment.

Most notable would be the failure of Energy Power Supply and Communications Systems.

ZOMM

We offer products to satisfy protection for many applications from low voltage telecommunications and signal lines to high current and voltage installations

Electrical Power Generation
Our AZA Series of MOV (Metal Oxide Varistor) assemblies offers customised options for the overvoltage/surge protection of DC exciters and similar or allied systems.

A wide range of continuous operating voltages and system energies can be accommodated in robust and compact assemblies.

AZA

Electrical Power Distribution
We also provide a range of Medium Voltage Silicone housed Surge Arresters (ASM) and a unique complementary range (TISA) which functions as an arrester and support insulator.

ASM **TISA**

Services
With many years of experience in the design and manufacture of overvoltage protection products, PD Devices Ltd are able to offer a bespoke design and consultation service.

This will provide invaluable assistance to a potential end user in the selection and installation of protection products. Reference will always be made to current standards pertinent to this complex area to ensure compliance.

Presentations can also be arranged that will explain the requirements of current standards and the approach to effecting appropriate solutions.

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All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance of any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for these products is set forth in our standard terms and conditions of sale.

For more information, please visit us at: <http://www.pddevices.co.uk>

