



# INTRODUCING PTSG ELECTRICAL SERVICES LTD



## Lightning Protection

Leading consultancy  
Design and  
installation services  
Annual inspection and  
testing  
Remedial repairs  
Retrofit upgrades to  
existing buildings

## Surge Protection

Leading consultancy  
Product and  
equipment advice  
Annual inspection  
and testing  
Remedial repairs  
Retrofit upgrades to  
existing buildings

## Specialist Earthing

Leading Consultancy  
Survey And Design  
Installation  
Commissioning  
Testing  
Maintenance

## Electrical Testing

Fixed wire testing  
Visual inspection  
Continuity of protective  
conductors  
Ring circuit continuity  
Insulation resistance test  
Polarity check  
Earth fault loop  
impedance test  
Prospective short circuit  
currents  
Operation of residual  
current devices  
Functional testing of  
assemblies  
Full testing of all static  
appliances  
Portable appliance  
testing (PAT)

## SWITCHED-ON SOLUTIONS



# LIGHTNING PROTECTION, SURGE PROTECTION AND SPECIALIST EARTHING

## Lightning Protection

We are the UK's biggest lightning protection business.

There are hundreds of thousands of lightning storms every year across the UK. Most lightning discharges harmlessly in the atmosphere, but it does strike the earth quite regularly.

Considering it travels at over 140,000mph, is hotter than the sun and can be upwards of one billion volts, if lightning strikes a building it can cause considerable damage and sometimes result in fatalities.

Building lightning protection is an absolute must, and with PTSG Electrical Services' national coverage and decades of experience in the design, installation and testing of lightning protection and earthing systems, there isn't a better service supplier.

PTSG is the market leader in lightning protection, with more than two centuries of collective experience in designing, supplying and installing lightning protection and earthing systems.

Depending on your needs, our expert design team can provide either a standard or bespoke solution. We can also offer layout drawings to meet architect, consultant and contract engineer specifications.

All new installations, remedial work, testing and inspections are undertaken by our experienced and thoroughly trained engineers based across the UK. We also provide additional services when rope access equipment is required.



## Design and Installation

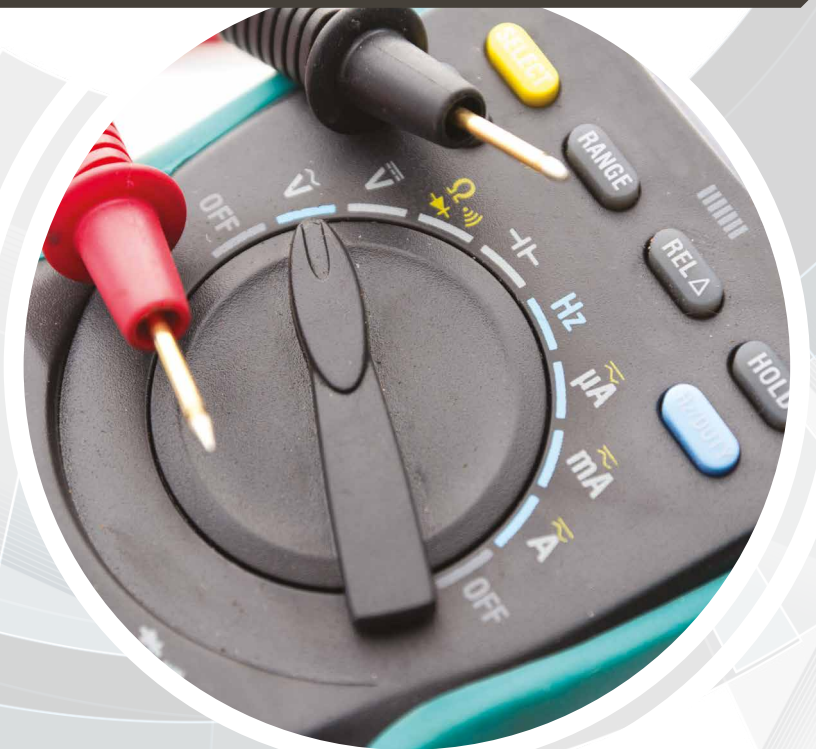
Working to BSEN 62305, PTSG Electrical Services' design skills can form part of a turnkey package or be provided as a standalone service.

Our engineers listen closely and understand our clients' requirements and respond quickly, effectively and competitively to their needs. The end result is a functional design package that meets the performance specifications and complies with current standards and codes of practice.

Our engineers offer clients a range of services including reviews of existing designs, writing of new specifications and drafting of CAD drawings showing layouts and details.

Whether you are looking at a standard product or a bespoke solution, our team of experienced designers can advise you on the most effective and efficient design to protect your building from ground strikes and power surges.

We can undertake this design service for both new builds, with the best advice and designs available if engaged at an early stage in the design process, and retrofit installations.



### Annual Inspection and Testing

Our team of expert engineers undertakes detailed testing and inspection of completed installations. This includes verifying the installation is in accordance with the correct specification and compliant with all current legislation.

The Electricity at Work Regulations 1989 require that lightning protection systems are tested regularly in accordance with BS6651 or BS EN 62305, whichever is applicable to your system.

This standard states systems should be tested at maximum intervals of 12 months. We recommend your system is tested at intervals of 11 inspection and testing months, meaning across a 12-month period your system will have been tested throughout every season of the year.

Applying this tried and tested method will allow for the effect of seasonal variations in resistance or other characteristics of the system to be taken into account.

Your system will last for many years if properly installed and maintained, maximising the return on your investment. Our service will also ensure that when your system is called upon to protect your people and other assets, it will be able to do so.



### Remedial Repairs

Periodic maintenance inspection of any type of equipment is a good idea. In the case of a lightning protection system, it is absolutely essential.

PTSG Electrical Services' engineers carry out annual inspections ensuring your lightning protection system is performing safely and efficiently.

During the inspection, the mechanical condition of all conductors, bonds, joints and earth electrodes should be checked and the observations noted.

The periodic inspections and tests will indicate what maintenance, if any, is needed. We also test and maintain early streamer emission (ESE) and Pulsar systems.

Many companies find working at height a costly and time-consuming inconvenience, but our engineers don't see it this way. As part of PTSG, our employees are all fully trained in working at height and comply with all the latest safety legislation.

As well as installing lightning protection systems on top of some of the country's highest buildings, they have been specially trained to undertake virtually any type of work at height. Our skill in at-height working allows us to offer an innovative approach to maintaining systems on buildings where access may be challenging, including on heritage sites and structures with unconventional architecture.

### Upgrades

PTSG Electrical Services is highly experienced when it comes to working on older equipment or equipment installed by other suppliers.

If you would like to look at the possibility of extending the lifespan of your existing equipment, whether PTSG installed it or not, or if you are thinking about changing supplier, then please get in touch.

Our Electrical Services team is regularly called upon to install, fit, or adapt systems installed by others and always improves what is already in place in a cost-effective way.



### Surge Protection

Power surges or transient overvoltages can be caused in two ways: either as the secondary effect of lightning strikes up to a kilometre away, or by the electrical switching of large inductive loads, such as motors and transformers. They may last less than a millionth of a second but they are powerful and potentially highly destructive.

PTSG Electrical Services can supply and install effective protection from surges with the Furze ESP maintenance-free range of voltage protectors. Ideal for use with:

- Mains power supplies
- Computer networks
- Data and telecoms equipment
- RF, CCTV, rail and CATV systems

## ELECTRICAL TESTING

The Health & Safety at Work Act 1974, the Management of Health & Safety at Work Regulations 1999, the Electricity at Work Regulations 1989, the Workplace (Health, Safety and Welfare) Regulations 1992 and the Provision and Use of Work Equipment Regulations 1998 require all electrical equipment used in, or associated with, places of work to be assessed on a regular basis by a competent person.

PTSG Electrical Services is a leading expert in fixed wire testing (also known as periodic testing) and portable appliance testing (PAT). These specialised processes ensure that electrical systems and appliances comply fully with UK legislation and where necessary are tested and certified.



## FIXED WIRE TESTING

Fixed wire testing, also known as periodic testing, protects buildings and employees from the two main electrical risks, fire and electrical shock.

Over a period of time, these risks increase as installations deteriorate, and it is in the best interests of not only you and your employees but also your insurance company that you have an installation that is electrically sound and free from the risk of fire.

PTSG Electrical Services will test electrical services and systems that conduct electricity around a building. We cover all hard wiring in a building including air conditioning, distribution boards, lighting, mains panels, socket outlets and other fixed plant.



## PORTABLE APPLIANCE TESTING

PTSG Electrical Services is a leading expert in risk assessment and portable appliance testing (PAT) – specialised processes which ensure that electrical appliances comply fully with UK legislation and where necessary, are tested and certified.

Through our cost and time-efficient building of risk assessment and PAT, we give businesses total peace of mind in knowing they have taken the right steps to ensure equipment is safe for use – both on and off-site.

The process is recognised by the insurance industry and without up-to-date risk assessments or test certificates, your insurance could be invalidated.





***Electrical Services Ltd***



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