



Street Furniture Guidance Document

Electricity
Distribution

nationalgrid

Guidance for Street Furniture Connections

This guidance document has been created to support you with arranging your electrical connection.

We have included information to guide you through the process from application to connection.

Metered or Unmetered Connection?

Metered Connection

Most energy transfers at points of connection and/or supply via circuits connected to the Licensed Distribution System should be metered.

A metered supply uses a standard electricity meter to record the amount of electricity being consumed. A meter is provided by your electricity supplier. You will need to arrange for your electricity supplier to attend after we have made your electricity connection, they will install the new meter.

Unmetered Connection

An unmetered Connection is a supply to equipment which does not require a meter, e.g. street lights, traffic signals and some communications cabinets.

The Electricity (Unmetered Supply) Regulations 2001 specify strict criteria for determining whether or not a connection can be unmetered.

In short, each piece of equipment;

- Must not exceed 500w;
- Must operate in a predicable manner and;
- Cannot be motion, IR or manually constrained.

The Electricity (Unmetered Supply) Regulations 2001 can be found in full via the below web link;

<https://www.legislation.gov.uk/ukxi/2001/3263/contents/made>

An Unmetered Supply Agreement must be in place before we can install an unmetered connection.

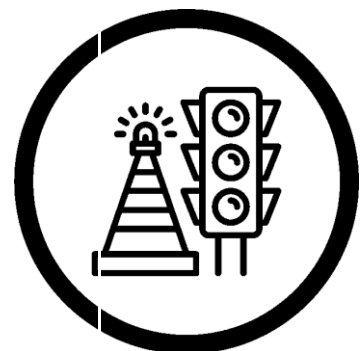
If the above does not apply to you, please apply for a metered connection.

Types of Unmetered Equipment

The following list shows typical types of equipment which may be considered for unmetered connections, providing the load complies with the requirements detailed above.

The list is not exhaustive and is for illustrative purposes only.

Advertising Hoardings	Pay & Display Machines
Bus Information Systems	Radio Transmitter
Cable Network Pillar	Red Runner Camera
Cathodic Protection	Security Camera
Clocks	Sewage flow recorder
Communication Cabinets	Speed Camera
Flood Warning System	Street Lighting
Ice Detector	Telephone Kiosk
Illuminated Bollards	TV Amplifier
Illuminated Map Cabinets	TV Camera
Information Signs	Traffic Signs
Navigation Signal	Traffic Signal/Pelican Crossing
	Warden call equipment



Standard Arrangement for Unmetered Connections

There are a number of standard arrangements for providing small unmetered connections. These are available to view in our Standard Technique SD5P which can be located on our Technical Information website

[ST:SD5P Relating to Design of Unmetered Connections \(nationalgrid.co.uk\)](https://www.nationalgrid.co.uk/ST:SD5P_Relating_to_Design_of_Unmetered_Connections)

An unmetered connection will only be made to a fused cut out / distribution board housed within a secure weatherproof cubicle, pillar or street lighting column. We cannot provide connections to cut outs located within traffic bollards, roundabouts, traffic islands or to compartments placed below ground.

For equipment located on a motorway or dual carriageway that requires a connection then the highway authority shall provide a pillar / enclosure remote from the carriageway.

The pillar / enclosure should be accessible via land adjacent to the carriageway and not from the hard shoulder.

For individual items of unmetered equipment where the connection utilises a street light the cut out is 25A.

Low Voltage Street Furniture Connections (Electric Vehicle Charge Points only)

An unmetered connection can be utilised as on street electric vehicle charge points when a measured Central Management System (MCMS) is used.

The exit point demand shall be < 7.36kW.

An Elexon approved active measuring device shall be used.



Approved Elexon active measuring devices include;

City EV

Ubitricity

Char.gy

Swarco

Earthing arrangements

All electricity connections require earthing to be installed which prevents shocks and creates a safe route for electrical current to travel.

There are different types of earthing available.

We can provide most non-metallic cabinets with a Protective Multiple Earthing (PME) terminal, however, metallic cabinets cannot have an earth terminal unless your electrical contractor carries out some additional preparation work in advance.

Terre Terre (TT) earthing will require an electrical contractor to install an earth electrode system. These are typically buried earth rods and a conductor. Where local earthing is used the installation normally has to be protected by a residual current device (RCD) in order to comply with BS 7671.

It would usually be your responsibility to provide suitable earthing arrangements for street furniture in advance of the connection being energised.

For more information on earthing arrangements please see our website:

<https://connections.nationalgrid.co.uk/information-for-electrical-installers>



Ready to apply?

You can apply for an unmetered connection online via our website using the following link

[National Grid - Unmetered supply](#)

You will need a location plan and a site location plan to hand in order to submit your online application.

The online application form should take no longer than 15 minutes to complete.

Alternatively, you can apply for an unmetered connection via post or email. A copy of our postal application can be found on our website using the below link;

[National Grid - Unmetered supply](#)

You will need to submit both a location plan and a site location plan with your postal / email application.

Once we've received your application we will be in touch within 2 days to discuss your scheme.



How much will it cost?

Each application is individually assessed and costs are determined in line with our Connection Charging Methodology Statements.

[National Grid - Connections charging statements](#)

The average cost for an unmetered connection is £2,417.

Your connection offer will reflect the cost of providing the connections requested and will take account of

- The type of surface to be excavated and reinstated e.g. tarmac, turf etc.
- The distance from the existing network mains cable.
- The number of connections, disconnections and transfers provided.
- Whether or not legal permissions are required.
- Traffic management costs

What Happens Next?

Once we have received your application form we will make an assessment of the works required and the associated costs, before sending you a connection offer.

We will issue the connection offer within 25 days in line with our Guaranteed Standards of Performance.



