

Meters and How to Read Them

Electricity Meters

There are three types of electricity meter in common use – standard (credit), variable rate (credit) and prepayment meters.

Standard (credit) meters: A standard meter usually measures electricity consumption in terms of kilowatt-hours – the amount of energy used by a load of one kilowatt over the period of one hour. With this type of meter, all electricity units are charged at the same rate, 24 hours a day.

Variable rate meters: Variable rate meters operate on the same principle as standard meters, but give more than one reading, i.e. for daytime/standard electricity usage, and for overnight/off-peak electricity usage.

Prepayment meters: Prepayment meters accept tokens/keys or cards that can be 'topped up' at a variety of local outlets. If a customer stops paying for electricity, the electricity supply can be cut off by a relay fitted into the meter. Prepayment meters are for both standard and off-peak supplies.

Gas Meters

There are two types of meter in common use – credit and prepayment meters.

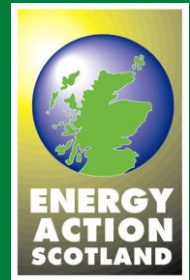
Credit Meters

The majority of gas customers have a credit meter which records the amount of gas used. Gas consumption is measured in units. For many older meters – imperial meters – gas usage is measured in cubic feet. For newer metric meters, gas usage is measured in cubic metres. These gas units need to be converted into kilowatt hours by:

- multiplying units used by 2.83 to give the number of cubic metres of gas used (if the meter is a newer metric one measuring gas in cubic metres this part of the calculation is not needed)
- multiply by the temperature and pressure figure (1.02264)
- multiply by calorific value (approximately 39.25, though the exact calorific value can be found on a gas bill)
- divide by 3.6 to get the number of kilowatt hours (kWh)

Prepayment Meters

Prepayment meters accept tokens/keys or cards that can be 'topped up' at a variety of local outlets. If a customer stops paying for gas, the supply can be cut off by a relay fitted into the meter.



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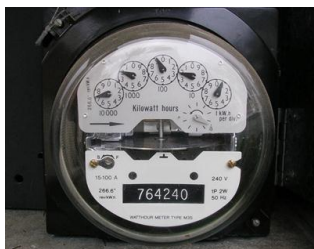
Recognising Types of Meter

Digital Meters:



These should be read from left to right. Electricity and gas metric meters have five numbers in a row whilst old-style gas imperial meters have four numbers in a row. Always ignore the red digit when recording a meter reading.

Dial Meters:



Dial meters are less common and more difficult to read. If the householder has one of these meters they may wish to contact an energy advisor from the local council or from the local Energy Saving Scotland advice centre for assistance in recording meter readings. Telephone free on **0800 512 012**.

Off-Peak Meters:



If the householder has electric central heating there will be either one or two meters showing up to three sets of numbers.

Electricity is usually charged at two different rates with a night (off peak) rate considerably cheaper than a day (peak) rate. It may be worth using certain electrical appliances, such as the washing machine, during the cheaper night hours.

If there are three sets of numbers, all the electricity for heating is recorded separately at a 'control' rate. All the electricity used for lighting and appliances is recorded at day or night rates, depending on time of use.

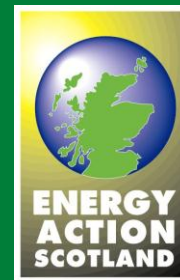
Reading a Meter

Credit Meters:

The majority of credit meters are digital i.e. a straight row of numbers. All digital meters are read in the same way. For electricity and for modern gas meters which measure intake in cubic metres read the first five digits. For older gas meters which measure in cubic feet only the first four digits should be read. Meters should be read from left to right. Zeros should be included, but red number(s) or any number(s) after a decimal point should be ignored.

However some older types are 'dial' meters. These have rows of dials with pointers which move from 0 – 9 which should be read from left to right. For electricity read all five dials, ignoring the final (usually red) dial.

The majority of gas dial meters have been replaced with newer meters. However, imperial (cubic feet) gas dial meters should be read in the same way, but there are only four dials.



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Prepayment Meters:

Visual displays are available usually by pressing a button. The display will 'scroll' through a cycle to show:

- Fuel used
- Fixed charges (if applicable)
- Rate(s) per unit of fuel
- Credit inserted (meter top-ups)
- Current credit
- Outstanding debt (if applicable)
- Debt repayments per week
- Emergency credit level



Different makes and models of prepayment meter may show slightly different ranges of information.

For information on Home Energy Monitors and Smart Meters, see Factsheet I.5.



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