Transformer

A **transforme**r is used to step up or step down the voltage of an alternating current. It consists of two isolated iron coils coiled around a soft iron core.

The **primary coil** is a wire coil connected to the alternating current supply.

The **secondary coil** is a wire coil that carries the current out.

The **output voltage** produced depends on the number of turns in the primary and secondary coils.

Step-up transformer	Step-down transformer
Primary coil Low input voltage Secondary coil High output voltage	Primary coil High input voltage Secondary coil Low output voltage
Primary coil has few wire turns	Primary coil has many wire turns
Low input voltage	High input voltage
Secondary coil has many wire turns	Secondary coil has few wire turns
High output voltage	Low output voltage