

# Wireless Charging Coils

Elec & Eltek’s wireless charging coils allow power to be transferred without a physical link by inductive coupling. They offer a range of charging coils which meet the WPC Coil requirements and therefore comply with the Qi standard of wireless power transfer.



Elec & Eltek are able to offer both transmit and receive coils in a variety of shapes and sizes according to a required specification, but can also provide a range of off the shelf coils as well.

Wireless charging works by transferring energy from the charger to a receiver via electromagnetic induction. The charger uses an induction coil to create an alternating electromagnetic field, which the receiver coil converts back into electricity to be fed into a battery or directly to an application. Typically, the charger and receiver should be close and correctly aligned over the top of each other, although a set orientation is normally not necessary.

Developed by the Wireless Power Consortium, “Qi” is an open interface standard that defines wireless power transfer using inductive charging over distances of up to 4 cm. A Qi-based wireless charging system uses resonant inductive coupling to enable a charging pad to transfer power to a compatible device when it is placed on top of the pad.

## Features

- ◆ Designed for portable electronic devices
- ◆ Meet WPC Coil requirements
- ◆ RoHS and REACH compliant
- ◆ High efficiency
- ◆ Safe and reliable
- ◆ Available in custom shapes and sizes

## Applications

- ◆ Wireless charging pads
- ◆ Portable devices
  - Particularly devices with waterproof/dustproof requirements
- ◆ Smart watches and Fitness Trackers
- ◆ Smart sensors

## Wireless Power System

