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AIR CHARGING

One of the features of the top smartphones of recent years is the ability to charge wirelessly. It is enough to put the device on a special contact pad to restore the energy reserve of the battery. The charging process ends automatically when the charge level reaches 100%.

Xiaomi has unveiled Mi Air Charge, a new next-generation wireless charging technology that allows you to charge multiple devices simultaneously without the need for cables or a wireless charging cradle.

The patented Mi Air Charge technology uses a special tower/box-shaped device that uses beam-forming technology to send millimeter waves directly to the device. These waves are converted into electrical energy that charges the device.

The tower has 5 phase antennas to help locate a smartphone in a room in milliseconds. It has 144 additional antennas that transmit millimeter waves.

The compatible phone has two antenna units, similar to those in the charger, but much smaller in size. The first is a radio beacon that communicates with the charging station, and the second is a receiving antenna array consisting of 14 antennas that receive millimeter waves converted into electrical energy.

The technology supports simultaneous charging of multiple devices over long distances, with a maximum power of 5 watts per device.

According to Adam Zeng Xuezhong, head of Xiaomi's mobile division, the plan is to charge wearable devices like smartwatches and fitness bracelets using Mi Air Charge Technology.

The main goal is to make 'apartments truly wireless' where speakers, lamps and smart home devices will work from one remote system. However, a spokesman said that the technology will not be used in commercial products this year.

The core technology is about positioning in space and transmitting energy. Charging is carried out through the influence of the induction field on the phone battery within its boundaries. Smartphones that do not support this type of charging require a special receiver-receiver, which can be hidden under the case, but the latest generation of phones has the technology initially installed.

The power standard for wireless charging of mobile devices is called Qi. The name reads 'Qi' because the standard was named after Qi energy, a key concept in Chinese philosophy denoting life energy.

The benefits of wireless charging are as follows.

It removes unnecessary wires from the space.

It is an extension of the ability to charge phones. It will be especially useful for forgetful people, as the charging radius is about 5 meters, which is enough to work fully in a modern apartment.

Security of the device.

With wireless charging, the phone is less susceptible to power surges than when it is plugged into an outlet. So, the battery will last longer.

You do not have to plug the cable into the charging jack all the time. This will save you from unnecessary scratches on the case and prolong the performance of the connector.

Disadvantages.

The environmental impact of wireless chargers has yet to be studied because of the newness of the technology.