## **VareseNews**

## Smartphones and radiation: the list of the most dangerous devices

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**BanklessTimes**, a well-respected technology magazine, has published the results of a study they carried out into which smartphones emit the most radio frequency radiation. The ranking has not yet been officially confirmed, but it certainly highlights an issue that is often neglected by the vast majority of the population.

It should be pointed out that **the data presented by the magazine has neither been confirmed nor denied by the companies**, nor by other organisations in the sector, and therefore the ranking does not necessarily correspond to reality. What is certain, however, is that this unenviable ranking brings to people's attention an issue that is often taken lightly.

Another thing that is certain is that all electronic devices do indeed emit radiation, and that the amount of radiation varies depending on the type of device, model, year, power of the transmitting antenna and distance from the nearest cell tower.

Together with the experts at MisterGadget, let's have a look at the curiosities that emerged from the ranking of the commercially available smartphones that emit the most radiation.

## The "specific absorption rate"

The Specific Absorption Rate (SAR) is the value that expresses the amount of radiation emitted by a smartphone, that is, the amount of energy that a specific mass of human tissue, the body, absorbs when it comes into contact with a radio frequency (RF) electromagnetic field.

Put more simply, it is the sum of the energy that a body absorbs in a given time period. It is expressed in units of power per mass (W/Kg). **Europe has set limits to safeguard the health of its inhabitants**. Any electronic device that exceeds the 2 W/kg limit in a 10 gram sample of tissue is considered non-standard and therefore cannot be sold on the market.

## The smartphones that emit the most radiation

The BanklessTimes's ranking of the Top 10 Smartphones includes older smartphones, many of which are no longer available or can no longer be found on the market. So, we can say that, over time, manufacturers have worked with the health of their users in mind. **First in the ranking is a Motorola smartphone.** Below is the complete ranking of the top 10 smartphones:

Motorola Edge, this smartphone is in first place, with a SAR measurement of 1.79 W/Kg

Axon 11 5G, with a SAR measurement of 1.59 W/Kg

OnePlus 6T, with a SAR measurement of 1.55 W/Kg

Sony Xperia XA2 Plus, with a SAR measurement of 1.41 W/Kg

Google Pixel 3 XL, with a SAR measurement of 1.39 W/Kg

Google Pixel 4a, with a SAR measurement of 1.37 W/Kg

OPPO Reno5 5G, with a SAR measurement of 1.37 W/Kg

Sony Xperia XZ1 Compact, with a SAR measurement of 1.36 W/Kg

Google Pixel 3, with a SAR measurement of 1.33 W/Kg

OnePlus 6, with a SAR measurement of 1.33 W/Kg

As we can see from the ranking, Apple, Samsung and Xiaomi, three of the largest companies that dominate the sector, do not have any smartphones in the blacklist. Fortunately, **most of the smartphones included are practically irrelevant in the Italian market,** but we cannot fail to point out that Google, with its Pixel models, performed very badly with respect to its main competitors.

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