

## ContainerPower Energy Solutions

# The reason why 5G base stations consume more power



## Overview

---

Are 5G base stations causing more energy consumption?

However, Li says 5G base stations are carrying five times the traffic as when equipped with only 4G, pushing up power consumption. The carrier is seeking subsidies from the Chinese government to help with the increased energy usage.

Will MIMO increase the energy consumption of 5G base stations?

As a result, there are many more hardware components per base station. Björnson believes this will probably increase the total energy consumption of 5G base stations compared to 4G. But as massive MIMO technology develops, its energy efficiency may also improve over time.

Will 5G reduce energy consumption?

According to recent research, the ultra-lean design that 5G networks are capable of will make it possible to put more components to sleep for a longer time, reducing energy consumption by almost 10 times compared to current systems when there are no users.

How will 5G affect the energy consumption of mobile operators?

Edge compute facilities needed to support local processing and new internet of things (IoT) services will also add to overall network power usage. Exact estimates differ by source, but MTN says the industry consensus is that 5G will double to triple energy consumption for mobile operators, once networks scale.

How will 4G & 5G networks work?

In both 4G and future 5G networks, operators will probably run their base stations so they transmit at the maximum power allowed by their licenses, in order to maximize the coverage, according to Björnson.

Will 5G double to Triple energy consumption?

Exact estimates differ by source, but MTN says the industry consensus is that 5G will double to triple energy consumption for mobile operators, once networks scale. Warnings of more power consumption are coming from some Chinese operators that are leading the world in 5G deployments.

## The reason why 5G base stations consume more power

---

### Contact Us

---

For catalog requests, pricing, or partnerships, please visit:  
<https://www.websparafotografos.es>