

# How to check 5g hybrid energy base station data





## Overview

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How much power does a 5G base station use?

Each nation has a different 5G strategy. For 5G, China uses 3.5GHz as the frequency. Then, a 5G base station resembles a 4G system, but it's on a much larger scale. For sub-6GHz in 5G, let's say you have a macro base station. The power levels at the antenna range from 40 watts, 80 watts or 100 watts.

What is the range of a 5G base station?

5G base stations use millimeter waves that are extremely limited in range. Each 5G base station has a range of between 800–1000 feet, or 0.15–0.19 miles. It makes up for its limited range by surpassing 4G in other key areas: data transfer speeds (bandwidth), latency, and capacity.

How can we improve the energy efficiency of 5G networks?

To improve the energy efficiency of 5G networks, it is imperative to develop sophisticated models that accurately reflect the influence of base station (BS) attributes and operational conditions on energy usage.

What is the 5G radio unit dataset?

II. 5G RADIO UNIT DATASET In this section, we introduce the 5G Radio Unit Dataset. The dataset used in our study comprised 102,705 hourly measurements collected over a period of 8 days. Each sample encapsulates a variety of features, classified into four main categories:



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