



**BLINK SOLAR**

# **Outdoor base station energy classification**



## Overview

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What is a base station?

This work in the present document is defined as delivered useful bits to UEs covered by this Base Station. A Base Station is more energy efficient when doing more work with same energy, doing same work with less energy or in the best case doing more work with less energy.

How is the energy consumption of a base station calculated?

The energy consumption of the Base Station under test shall be calculated during the whole test period. The total daily energy consumption of the Base Station will be the sum of weighted energy consumption for each traffic level i.e. low, medium and busy-hour traffic.

How does the energy consumption of radio base stations affect OPEX?

As the set of configurations gets larger the combi-nations of configurations on a hardware-software product, e.g., a 5G radio base station, increases quickly. As a consequence tractability decreases and optimization becomes harder.  
Figure 1.1: The effect of the energy consumption of radio base stations on the operator OPEX .

What percentage of the energy consumption comes from ran (radio access network)?

Figure 1.1(c) then shows that of the energy consumption of the network, 70%-90% comes from the RAN (Radio Access Network) of which 70% of the energy consumption comes from the Radio Base Stations, see Figure 1.1(d).

## Outdoor base station energy classification

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### Energy-efficiency schemes for base stations in 5G ...

EE solutions have been segregated into five primary categories: base station hardware components, sleep mode strategies, radio transmission mechanisms, network deployment and ...

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### [384] Proposed new Technical Report on ITU-T L.TR\_CR\_BS "Energy

[384] Proposed new Technical Report on ITU-T L.TR\_CR\_BS "Energy Efficiency Classification Requirements of Base Station Sites"

## ITU-T Work Programme

Therefore, there is a need to develop a comprehensive and systematic approach to classify and determine the site energy efficiency metrics for various base station site scenarios.



 LFP 280Ah C&I



## A Base Station Deployment Optimization using Energy ...

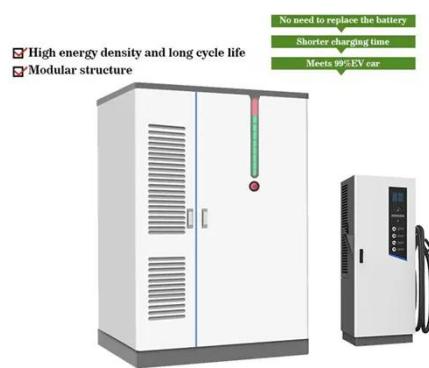
A Base Station Deployment Optimization using Energy Efficiency for Networks with Integrated Access and Backhaul , IEEE Conference Publication , IEEE Xplore

## Large-scale Outdoor Communication Base Station , Reliable & Energy

Discover the Large-scale Outdoor Communication Base Station, designed for smart cities, communication networks, and power systems. Integrated with solar, wind, and energy storage ...



## Energy performance of off-grid green cellular base stations



We apply this framework to evaluate the energy performance of homogeneous and hybrid energy storage systems supplied by harvested solar energy. We present the complete ...

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## Energy Consumption Modelling for 5G Radio Base ...

In this thesis linear regression is compared with the gradient boosted trees method and a neural network to see how well they are able to predict energy consumption from field data of 5G ...



## TS 103 786

The Base Station energy efficiency KPI is an indicator for showing how energy efficient a Base Station is for doing a work. This work in the present document is defined as ...

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## STUDY ON AN ENERGY-SAVING THERMAL ...

unication base stations has become one

of the important ways to save energy. Practical applications showed that the outdoor communication base station has a high ...



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## Contact Us

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