

# **Base station room energy storage environmental assessment**





## 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 ESS is connected to a base station?

Scheme 1: The classic scheme in which the base stations are only powered by grid electricity. Scheme 2: The PV modules are connected in series to obtain higher voltage and are connected to the AC bus of the base station through an inverter with MPPT function. ESS is connected to the 48 V DC bus through bidirectional DC/DC converter.

How is uncertainty assessed in the measurement of dynamic efficiency of a base station?

The assessment of uncertainty in the measurement of the dynamic efficiency of a Base Station shall be based on the general rules provided by the IEC/ISO Guide 98-3:2008 or equivalent GUM:2008 . Type A: Those which are evaluated by statistical means.



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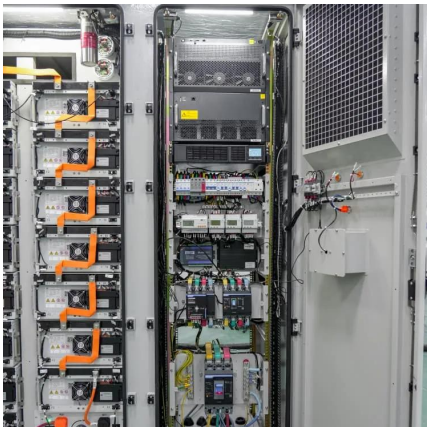
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## TS 103 786

Feb 2, 2024 · TS 103 786 - V1.2.1 -  
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method for energy efficiency of wireless access  
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