

# **Base station power supply voltage**





## Overview

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What is a communication base station power supply?

Communication base station power supply in the tower room power supply system is an essential and important part of the mobile communication network. The current communication power supply voltage level is divided into DC-48V (+24V), AC 220/380V. Communication industry equipment generally use -48V DC power supply, positive grounding, why?

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Why do communication base stations use -48V power supply?

Communication base stations use -48V power supply for most historical reasons. Historically, the communications industry equipment has been using -48V DC power supply. -48V is also known as positive ground.

What is -48V DC power supply voltage?

The current communication power supply voltage level is divided into DC-48V (+24V), AC 220/380V. Communication industry equipment generally use -48V DC power supply, positive grounding, why?

In this article, I will analyze it for you. Why does -48V DC power supply become the power supply voltage of communication base station?

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Which power supply voltage is used in communications industry?

Historically, the communications industry equipment has been using -48V DC power supply. -48V is also known as positive ground. Because the smallest communications network and communications engineering are in the telephone network, the telecom bureau power supply voltage are 48V.



## Base station power supply voltage

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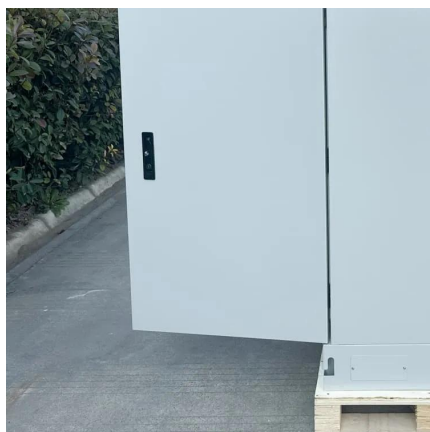


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May 25, 2025 · Building better power supplies for 5G base stations Authored by: Alessandro Pevere, and Francesco Di Domenico, both at Infineon Technologies



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Figure 3. A power supply for a 5G macro base station block diagram. Highlighted ICs The MAX15258 is a high voltage multiphase boost controller with an I<sup>2</sup>C digital interface designed ...

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Figure 3. A power supply for a 5G macro base station block diagram. Highlighted ICs The MAX15258 is a high voltage multiphase boost ...



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