



LLSE CONTAINERS

# Base station communication room ground wire resistance





## Overview

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What is a good grounding electrode resistance for a communication tower?

According to the IEEE Std 142-1991 and IEEE Std 142-2007 (The Green Book), the communication tower grounding electrode resistance of large electrical substations should be 1 Ohm resistance or less. For commercial and industrial substations including cell site and telecommunications sites the recommended resistance to ground is 5 Ohms or less.

What is a communication room ground system?

K. Other Communication Room Ground Systems: Ground metallic conduit, wireways, and other metallic equipment located away from equipment racks or cabinets to cable tray or telecommunications ground busbar, whichever is closer, using insulated 16 mm<sup>2</sup> (6 AWG) ground wire bonding jumpers.

Can a communication tower be grounded with a 5 ohm resistivity test?

With proper soil resistivity testing however, we can provide communication tower grounding solutions that will achieve 5 ohm resistance to ground and meet the stringent requirements such as the Motorola R56 standard to keep your valuable equipment within warranty.

What are the standards for cell site grounding & telecommunications tower grounding?

Our cell site grounding, telecommunications grounding and communication tower grounding methods closely follow the Motorola R56 standards and IEEE Std 142-1991 and IEEE Std 142-2007 recommended Practice for Grounding of Industrial and Commercial Power Systems guidelines for cell site and telecommunications sites.



## Base station communication room ground wire resistance



### [Grounding and Bonding For Home Stations](#)

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### [On Communication Tower Grounding Under Lightning ...](#)

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### [VA 27 05 26 Grounding and Bonding for ...](#)

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### [Bonding and grounding Strategies for the ...](#)

Aug 5, 2025 · It is intended that the AC power ground path and the telecommunications ground path offer redundant and specific ground paths for the equipment. While the AC-powered ...



### [Where Grounding Bonds with Science Grounding Issues ...](#)

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## [Cell Tower Grounding: Safety & Compliance ...](#)

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## [ITU-T Rec. K.112 \(07/2019\) Lightning protection.](#)

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Summary Recommendation ITU-T K.112 provides a set of practical procedures related to the lightning protection, earthing and bonding of radio base stations (RBSs). It considers two types

...

## **LBI-39067**

Dec 15, 2006 · If we also bury the interconnecting wire below the soil surface we are able to lower the ground resistance below 200 ohms. With these conditions as a point of reference, the ...



## [Cell Tower Grounding: Safety & Compliance Solutions](#)

5 days ago · The experts at E& S Grounding Solutions provide comprehensive cell site grounding and telecommunication grounding solutions for Cell Site grounding or BTS Cellular Base ...



## SECTION 27 05 26

Nov 11, 2020 · UL Compliance: Comply with applicable requirements of UL Standards No.'s 467, Electrical Grounding and Bonding Equipment", and 869 "Electrical Service Equipment", ...



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