Solar Storage Container Solutions

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Overview

How does 5G work?

Like all radio communications, including radio and television broadcasting, satellite communications, and previous generations of mobile networks, 5G uses radio waves to transfer information between base stations and connected devices. Radio waves are a form of electromagnetic fields that are transmitted and received by antennas.

Should RF EMF exposure be considered when adding 5G radios and antennas?

When adding 5G radios and antennas to an existing base station site, the total RF EMF exposure from all antennas and technologies (2G, 3G, 4G, and 5G) has to be considered for assessment of compliance with limits and regulations. Figure 2.

What is a 5G NR antenna pattern?

An instantaneous traffic beam antenna pattern (blue curve), the envelope of all traffic beams (green curve), and a six-minute averaged pattern (red curve) measured in a live 5G NR network (3.5GHz) using Ericsson AIR6488 massive MIMO radios. Figure 7.

What frequency band does 5G use?

They belong to the radio frequency part of the electromagnetic spectrum, as shown in Figure 1. 5G uses frequency bands assigned by regulators ranging between 600MHz and 40GHz, which are within or adjacent to the ranges that are already used by previous generations of mobile networks, satellite communications, and other radio applications.

How far should a 5G radio be from a public area?

For 5G radios, the necessary distance to keep to public areas varies from less than a few centimeters for low-power indoor products to a few meters for outdoor micro products mounted on walls and poles, and up to about 20m for

macro products installed on rooftops, masts, and towers.

What is a 5G antenna?

5G uses the latest generations of antennas, known as adaptive antennas. They consist of 64 or 128 radiating elements, and this is set to increase in the future. These elements target devices specifically and thus reduce scattering loss. 5G uses the latest generations of antennas, known as adaptive antennas.

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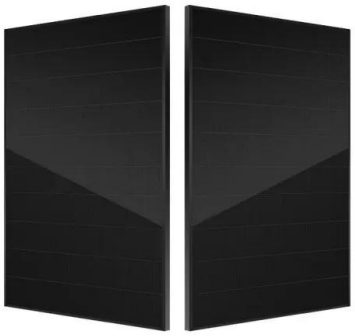

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