

## Solar Storage Container Solutions

# Ground auxiliary base station emergency communication



## Overview

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What is integrated satellite-ground emergency constructed-network technology solution after disaster (ISG-ECN)?

In this article, we propose an integrated satellite-ground emergency constructed-network technology solution after disaster (ISG-ECN). The emergency communication network mainly includes two parts: ground Mesh network () and satellite portable station.

What is a ground BS antenna?

The paper introduces a ground BS antenna design for the 5.9-8.5 GHz band. The main contributions include wide-band, high-isolation antenna array concept for the ground BS antenna, along with an analysis of how the antenna array dimension affects the signal-to-noise-and-interference ratio and throughput in ATG systems.

What is emergency communication network?

The emergency communication network mainly includes two parts: ground Mesh network () and satellite portable station. Among them, the ground Mesh network is used to construct a local area network () covering the geological disaster site, and the satellite portable station is used to connect the local area network to the external public network.

Can antennas be used for direct air-to-ground communications?

This paper proposes an antenna solution for direct air-to-ground (ATG) communications, particularly focusing on the challenges and potential of the digital airspace vision. The intra- and inter-cell interference caused by sidelobes of ground base station (BS) antennas and the bandwidth constraints at sub-6 GHz bands are important limitations.

How does a geological disaster affect the emergency communication network?

Particularly when a major geological disaster occurs, it will do harm to the

existing mobile communication network, present additional difficulties to rescue work, and have a significant impact on the rescue work for the speed of reconstruction of the emergency communication network after the disaster ().

Can a 6g antenna be used for direct air-to-ground communications?

**Abstract**—The sixth generation (6G) of mobile communication networks aims to bring innovations in mobile broadband solutions and airborne communications. This paper proposes an antenna solution for direct air-to-ground (ATG) communications, particularly focusing on the challenges and potential of the digital airspace vision.

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## Airborne Base Stations Bring Back Connectivity

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## What Is ARCS? , NYC Auxiliary Radio Communication Systems

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## UAV as Auxiliary Base Station uses Deep Learning to

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## Energy-Efficient Networking for Emergency ...

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## A Fair-Throughput Optimization Scheme in Emergency Satellite Communications

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## Learning-Based Cooperative Aerial and Ground Vehicle ...

Mar 3, 2023 · Therefore, emergency communication with rapid response is crucially important for search and rescue in the event of disasters. Currently, acting as air base stations (BSs), relay ...

## Air Auxiliary Base Station Deployment Optimization in UAV ...

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## Energy-Efficient Networking for Emergency Communications with Air Base

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## Integrated satellite-ground post-disaster emergency communication

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