Design of wind power emergency rescue scheme for communication base station

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.

Can a UAV-assisted emergency network be established in disasters?

Unmanned aerial vehicle (UAV)-assisted networking is emerging as a promising method to establish emergency networks. In this article,a unified framework for a UAV-assisted emergency network is established in disasters.

Can unmanned aerial vehicle-assisted networking improve emergency communication?

Abstract: Reliable and flexible emergency communication is a key challenge for search and rescue in the event of disasters, especially for the case when base stations are no longer functioning. Unmanned aerial vehicle (UAV)-assisted networking is emerging as a promising method to establish emergency networks.

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.

This large-capacity, modular outdoor base station seamlessly integrates photovoltaic, wind power, and energy storage to provide a stable DC48V power supply and optical distribution.

Reliable and flexible emergency communication is a key challenge for search and rescue in the event of disasters, especially for the case when base stations are no longer functioning. ...

In order to cope with the complex and changeable power emergency communication problems in the field environment, this article adopts multi-network integration technology to achieve the integration ...

In recent years, the importance of renewable energy sources has become increasingly clear, especially in emergency situations. Among these sources, wind energy stands out as a ...

The wind-solar-diesel hybrid power supply system of the communication base station is composed of a wind turbine, a solar cell module, an integrated controller for hybrid energy ...

The collaborative deployment of multiple UAVs is a crucial issue in UAV-supported disaster emergency communication networks, as utilizing these UAVs as air base stations can ...

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With the development of 5G technology, a convenient and fast emergency communication solution is needed when the local ground base station is unavailable for disaster. ...

On the one hand, when the UAV acts as an aid to assist ground base station communica-tion, the authors established a two-layer hybrid communication model for UAVs and ground networks ...

According to the requirements of emergency rescue, the portable satellite ground station is powered by a detachable battery, which can work continuously for more than 6 hours with fully charged.

Satellite networks play a significant role in emergency communication (), but the traditional scheme mainly relies on a singular satellite vehicle or satellite portable station () to construct ...