

SolarInnovate Energy Solutions

5g mobile communication emergency base station



Overview

What is a 5G base station?

A 5G network base-station connects other wireless devices to a central hub. A look at 5G base-station architecture includes various equipment, such as a 5G base station power amplifier, which converts signals from RF antennas to BUU cabinets (baseband unit in wireless stations).

Can 5G extend emergency use in untraversed area?

In this work, we provide a solution for emergency use in untraversed area, based on the Unmanned Aerial Vehicle (UAV) platform, 5G could extend the service area to most areas all over the world when necessary without establishing ground based stations, providing satisfied QoS and stability.

Could 5G UAV be a solution to emergency communication method?

Along with the rapid development of UAV, it could loiters longer and carry heavier payload, which may become the possible solution of emergency communication method using 5G. But the standardization of 5G UAV network remain uncertain in the upcoming specifications.

What is a 5G UAV network?

The overall goals of the 5G UAV network are driven by data traffic. Not only the access network architecture and physical layer technology, but the core network architecture is more in line with the organic combination of the microservice concept and the virtualization of network element functions.

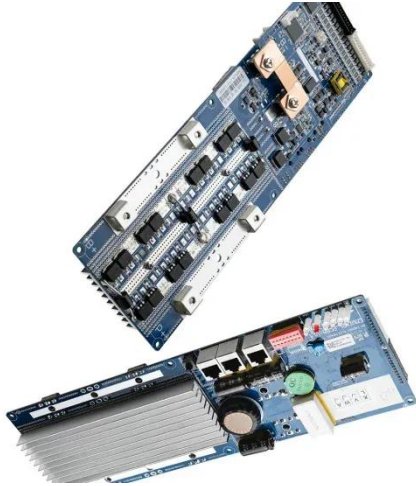
Is UAV a candidate for non-terrestrial 5G network?

Conclusion is drawn in the last part. UAV has become candidate of non-terrestrial 5G network because of the flexibility and better performance. In this part, the architecture and solution are discussed in detail, core network, base station, terminal, backhaul are introduced separately.

What is satellite based 5G?

The satellite based 5G is the simple and effective way to tackle the coverage problem, especially when the price of low orbit satellite continues to reduce. There are many satellite based discussions and solutions in academic and industry.

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UAV based 5G Wireless Networks: A Practical Solution for Emergency

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UAV based 5G Wireless Networks: A Practical Solution

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architecture for 5G

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