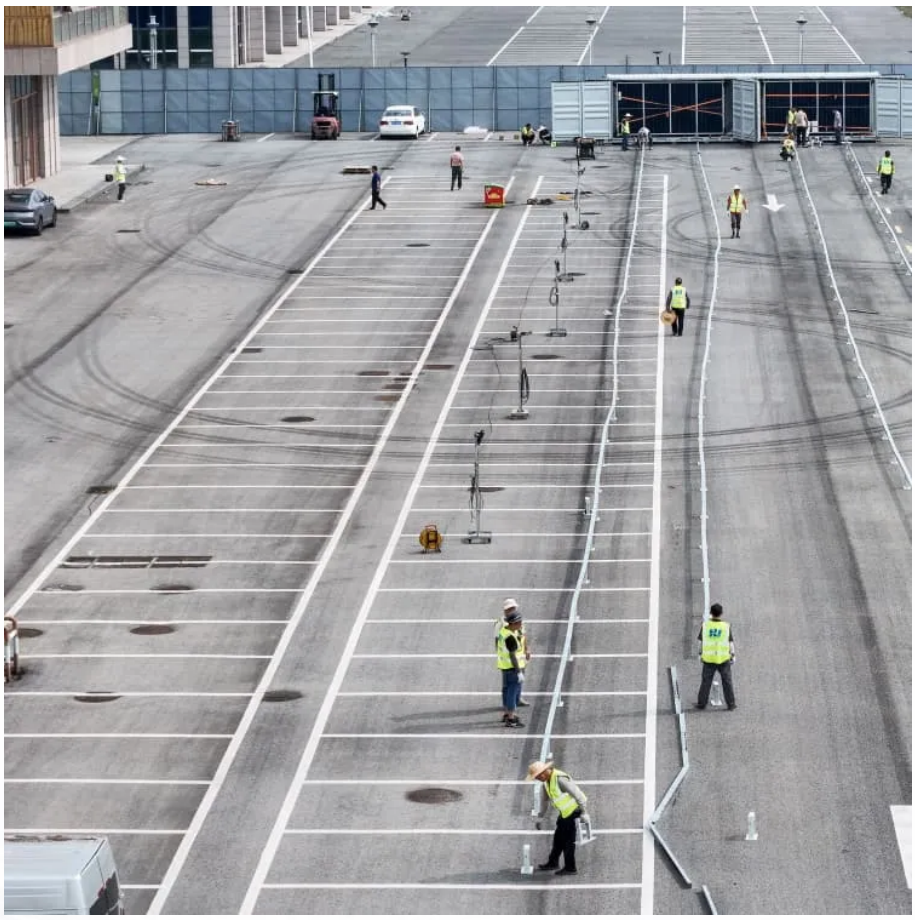
GOODS CONTAINERS

Small base station for three-dimensional communication



Overview

Can unmanned aerial vehicles be a base station for IoT?

Recently, unmanned aerial vehicles (UAVs) have been reported a lot as aerial base stations (BSs) to assist wireless communication in Internet of Things (IoT). However, most results for UAV deployment require uniform access requirements and obstacle-free environment.

Can a fixed base station deliver a high-reliable and low-latency communication capacity?

However, achieving the ultra-reliable and low-latency communication capacity promised by 6G is not possible with fixed base stations alone. In particular, environments such as densely populated areas, disaster areas, rural areas, and hard-to-reach areas are among the scenarios where fixed infrastructures are inadequate.

How are base stations based on ray-tracing based channel modeling?

Additionally, at their new locations, these behaviors are adjusted to facilitate accurate coverage estimation from the base stations they serve. In the deployment optimization of UAVs, the placement of base stations is determined using received signal strength data obtained through the ray-tracing-based channel modeling technique.

Are uncrewed aerial vehicle-mounted base stations a viable solution?

Uncrewed Aerial Vehicle-mounted Base Stations (UAV-BSs) have been envisioned as a promising solution to enable high-quality services in next-generation mobile networks. With inherent flexibility, one key challenge is placing the UAV-BSs adaptively to time-varying network conditions to maintain stable connections.

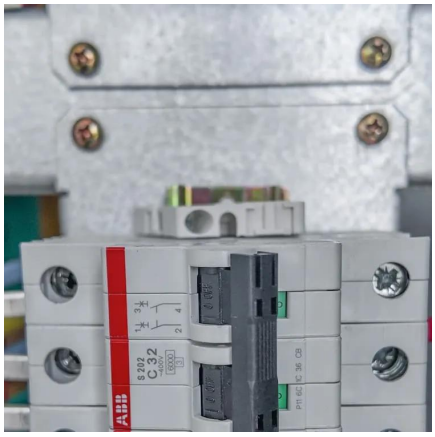
Small base station for three-dimensional communication

Adaptive Multi-Scale Bidirectional TD3 Algorithm for Layout

With the rise of 6G communication technology, the issue of communication coverage in mountainous areas has become increasingly prominent. These regions are ...

linhhoang-ex/uav-bs-placement-drl

This repository is the implementation of the deep reinforcement learning (DRL) framework for multi-UAV 3D placement optimization proposed in the paper Adaptive 3D Placement of Multiple ...



3D Deployment of Unmanned Aerial ...

Unmanned aerial vehicles (UAVs), also named as drones, have become a modern model to provide a quick wireless communication infrastructure. They have been used when conventional base stations' ...

3D deployment of UAV-mounted base stations for

Recently, unmanned aerial vehicles (UAVs) have been reported a lot as aerial base stations (BSs) to assist wireless communication in Internet of Things (IoT). However, most ...

3D Deployment of Unmanned Aerial Vehicle-Base Station ...

Unmanned aerial vehicles (UAVs), also named as drones, have become a modern model to provide a quick wireless communication infrastructure. They have been used when ...

Three-Dimensional Deployment Optimization of UAVs Using ...

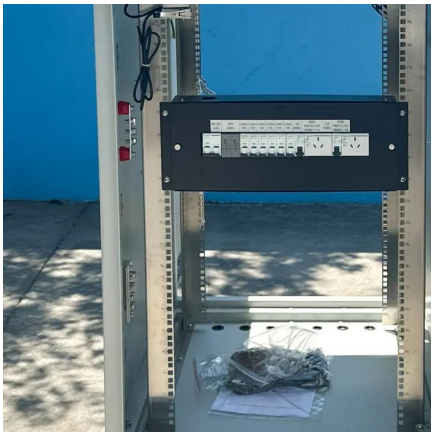
Prominent solutions include unmanned aerial vehicles capable of providing base station services, reconfigurable intelligent surface technologies, portable small cell systems, ...

Three-dimensional server deployment optimization in multi ...

This paper addresses the three-dimensional deployment problem of UAV aerial base stations equipped with edge servers in emergency rescue scenarios. A UAV deployment and ...

3-D Positioning and Resource Allocation for Multi-UAV Base Stations

Based on the proposed channel model, we formulate the joint optimization problem of UAV three-dimensional (3-D) positioning and resource allocation, by power allocation, user ...



Three-Dimensional Deployment Optimization ...

Prominent solutions include unmanned aerial vehicles capable of providing base station services, reconfigurable intelligent surface technologies, portable small cell systems, mobile base stations, and ...

Adaptive 3D Placement of Multiple UAV-Mounted Base Stations ...

Uncrewed Aerial Vehicle-mounted Base Stations (UAV-BSs) have been envisioned as a promising solution to enable high-quality services in next-generation mobile networks. ...

3-D Positioning and Resource Allocation for Multi-UAV ...

N recent years, unmanned aerial vehicle (UAV)-assisted communication systems have attracted increasing attention for supporting the seamless coverage in the beyond fifth ...

Contact Us

For catalog requests, pricing, or partnerships, please visit: https://woodgoods.pl

Scan QR Code for More Information

https://woodgoods.pl