

Base station communication signal detection





Overview

Why is BS a good G-Distance sensing system?

g-distance sensing: The power of BS is high, owning excellent performance in long-distance sensing. Mutual benefit between sensing and communication: The sensing function assists communication in beamforming and beam alignment. Communication assists sensing in providing the pr.

Can a fake base station avoid detection?

Similar to many other detection-based schemes, there can be a fake base station that can avoid detection, i.e., it is not detected as a faulty base station, but that would result in the attacker reducing its availability threat impact and releasing the connectivity setup.

What does a base station do?

The base station acts as a bridge gateway between the user equipment and the core network. The core network provides service connectivity to the user equipment by authentication management, identity management, and mobility management.

How far is a target antenna from a base station?

In the case of a 20M bandwidth communication signal and dual base station target detection, for a target within a cell communication range of the base station (2 km) and its cross-sectional area is relatively large, theoretically the distance from the target antenna to the receiving antenna is 0.45 km.



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5G Native Network Function for False Base Station Detection ...

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[Characterization of Monostatic Base Stations Sensing ...](#)

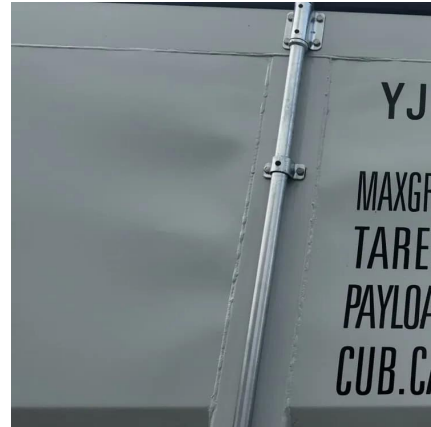
We introduce a novel architecture that repurposes existing 3GPP signals--Synchronization Signal Blocks (SSBs) and Positioning Reference Signals (PRSs)--for monostatic sensing at base ...





Rogue Base Station Detection in Industrial Internet of ...

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