

5g millimeter wave communication micro base station





Overview

Are 5G mm-wave antennas suitable for base station applications?

The antennas mentioned above are dedicated for the 5G mobile devices but cannot be adopted for base station applications because of their low gain. Consequently, in this work, we propose a novel antenna array suitable for 5G mm-wave base station applications.

What is a 5G mmWave terminal?

An Industrial 5G Terminal supporting 5G mmWave 5G terminals supporting 5G millimeter-wave are the key to spreading 5G millimeter-wave communication systems using the millimeter-wave frequency band.

Can mm-wave 5G communication systems have a high gain antenna array?

This paper presents the design and analysis of an antenna array for high gain performance of future mm-wave 5G communication systems. The proposed antenna is based on planar microstrip technology and fabricated on 0.254 mm thick dielectric substrate (Rogers-5880) having a relative permittivity of 2.2 and loss tangent of 0.0009.

What frequency band is 5G mm wave based cellular communication?

The prominent frequency bands for the 5G mm-Wave based cellular communication are 24–28 GHz, 37–40 GHz, and 64–71 GHz 6, 7. This will inevitably raise new challenges 8, 9, 10 including the free space path loss and hardware impairments.



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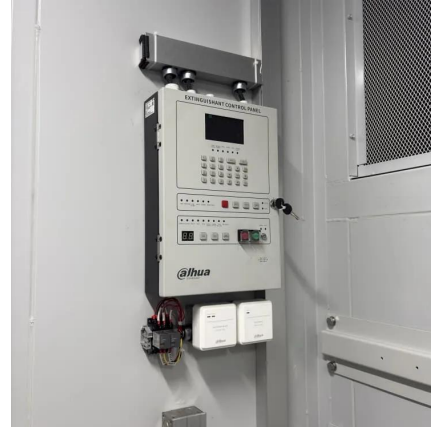


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