Multiband Microstrip Slotted Patch Antenna for mmWave 5G Femtocell Applications

Authors : Bhargavi G., Arathi R. Shankar

Abstract : Transmitter and receiver closer to every other, which creates the twin benefits of better-nice links and more spatial reuse. In a network with nomadic customers, this inevitably includes deploying greater infrastructure, normally in the form of microcells, hot spots, disbursed antennas, or relays. A less pricey alternative is the recent concept of femtocells, additionally known as domestic base stations that are facts get admission to points installed by means of domestic users to get higher indoor voice and records insurance. Femtocells have the potential to offer excessive exceptional community get entry to indoor customers at low cost, even as concurrently reducing the load. gift femtocells that perform in 4G can also be extended for 5G sub-6 GHz band. Designing the femtocell in mmWave band of 5G may have many blessings in terms of bandwidth availability and coverage. Multiband microstrip patch antennas can be considered as a low value and prominent antennas in designing the femtocells because the single antenna helps multiple frequency.

Keywords : 5G, mmWave, antennas, wireless communications, femtocell

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