
Base station uplink communication mode

What is the uplink band of a GSM network?

Specifically, 5925 MHz to 6425 MHz is the uplink band, and 3700 to 4200 MHz is the downlink band. In GSM (Global System for Mobile Communications) networks, the packet transmission from the MS to the BTS is the uplink, and the transmission from the BTS to the MS is the downlink.

What is uplink frequency?

Uplink indicates the transmission path from a mobile or fixed terminal to the network side. The specific frequency used for all transmissions from the Mobile Subscriber Unit (MS) to the Base Station (BS) (i.e., Node-B, eNB) is known as the uplink frequency. Data transmission from the MS to the BS is considered the uplink direction.

What is NR-ul transmission mode?

In 5G New Radio (NR), the NR-UL (Uplink) Transmission Mode refers to the specific configuration and operation of the uplink communication from the User Equipment (UE) to the base station (gNodeB). NR defines multiple uplink transmission modes to accommodate various use cases and network conditions. These modes determine how the

What is the difference between uplink and downlink in GSM?

In GSM (Global System for Mobile Communications) networks, the packet transmission from the MS to the BTS is the uplink, and the transmission from the BTS to the MS is the downlink. The GSM frequency range from 890 MHz to 915 MHz is used as the uplink frequency, while 935 MHz to 960 MHz is used as the downlink frequency. What is Downlink?

Explore the fundamental differences between uplink and downlink in wireless networks, including examples in GSM and satellite communication, frequencies, and technical components.

In this paper, we present a practical yet efficient uplink MU-MIMO mmWave communication scheme (UMMC) for a wireless local area network (WLAN). UMMC allows mul ...

Abstract--To cope with the even more urgent spectrum and energy efficiency challenge for trillion-level terminal access and data uploading in the next generation mobile ...

Communication Between gNB and UE Nodes Packet communication is central to the 5G new radio (NR) interface. This topic presents the communication flow between the 5G base station ...

2. 5G Uplink Challenges and Enhancement Techniques Since 3GPP Release 15 specifications were first published there were certain challenges that uplink performance had ...

Communication Between gNB and UE Nodes Packet communication is central to the 5G new radio (NR) interface. This topic presents the ...

In this paper, we propose an RIS-integrated base station (BS) by deploying an RIS sufficiently close to the base station antennas (BAs), within its radiative near-field range.

In this paper, we introduce the concept of Index Modulation (IM) into the double RIS (D-RIS) uplink Multiple-Input Multiple-Output (MIMO) communications, utilizing the antenna ...

Explore the fundamental differences between uplink and downlink in wireless networks, including examples

in GSM and satellite communication, ...

Reconfigurable intelligent surface (RIS) has gained significant momentum as a cost-effective and energy-efficient technology to enable the next generation of mobile ...

Abstract--Movable antenna (MA) is an emerging technology which enables a local movement of the antenna in the transmitter/receiver region for improving the channel ...

In 5G New Radio (NR), the NR-UL (Uplink) Transmission Mode refers to the specific configuration and operation of the uplink communication from the User Equipment ...

Web: <https://www.studiolyon.co.za>

