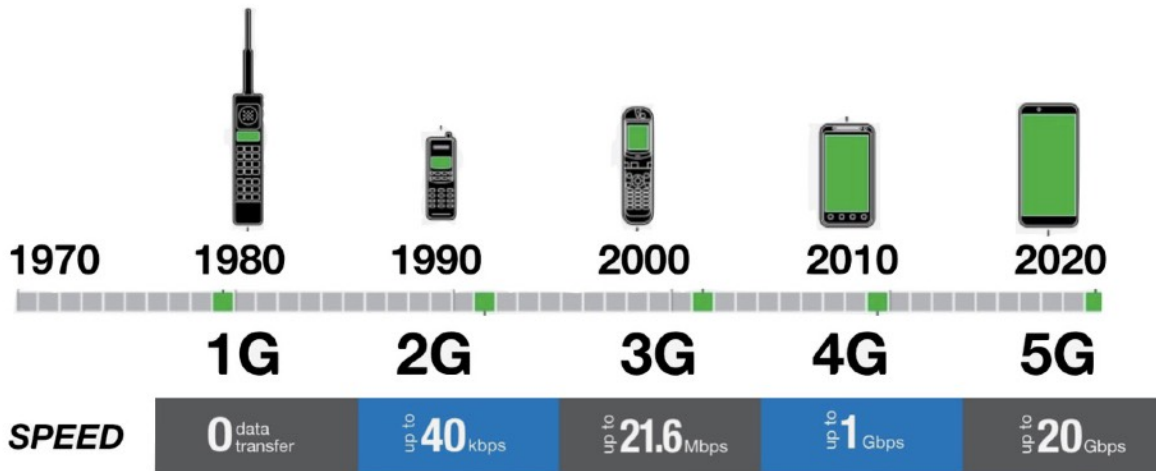


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5G - Serious Speed!

The explosive growth of both users and mobile devices has pushed 4G capacity to its limits. The emerging 5G network architecture will provide up to 1000x more traffic at ten times the current speed of 4G/LTE.

Understanding how 5G works is complicated. Despite marketing claims of '5G' by some service carriers, 5G technology will NOT work on most current 4G/LTE devices. 5G is the integration of five different technologies:



5G and 4G work together with long range towers and short range small cell antennas all connected together via high speed fiber optic cable. Driverless automobiles, robotic deliveries and other technologies demanding continual

high speed access to the internet are driving this boom. The current explosion of small cell networks is essential to meet the high density antenna requirements of 5G.

Each small cell is connected to the network of local and centralized servers via high speed fiber optic cable. Small cells are typically attached to high exposure locations such as rooftops, utility poles and streetlights and the risk of damage due to lightning is significant. Suppression protecting both power and data at these locations is critical to maintaining network reliability.

The Cellular Telecommunications Industry Association (CTIA) estimates that the number of small cell locations in the United States will grow from 86,000 in 2018 to over 800,000 by 2026.

5G infrastructure will need to be reliable in order to support the new technologies that users will come to rely upon in their daily lives.



5G combines long and short range antennas connected to the internet via fiber optic cable,