Understanding Fixed Wireless Internet Connection: A Quick Guide

Introduction:

Fixed wireless internet connection is a type of broadband service that utilizes radio signals to deliver internet access to homes and businesses. This support article provides a brief overview of how fixed wireless works, highlighting its key components and benefits.

The Basics of Fixed Wireless:

Fixed wireless internet uses radio communication between a transmitting tower and a fixed antenna installed at your premises. Instead of relying on physical cables like fiber optic or copper, fixed wireless technology delivers internet connectivity wirelessly through the air.

Transmitter Tower:

A key component of fixed wireless is the transmitter tower, often located on elevated structures such as tall buildings, towers, or communication masts. These towers are equipped with specialized equipment that transmits high-frequency radio signals over a wide area.

Subscriber Antenna:

At your premises, a fixed wireless installation involves mounting a subscriber antenna, also known as a receiver or dish, on the rooftop or an elevated location. The subscriber antenna is designed to receive the radio signals transmitted from the nearby tower.

Line of Sight (LOS) Requirements:

Fixed wireless connections typically require a clear line of sight (LOS) between the subscriber antenna and the transmitter tower. Obstructions such as trees, buildings, or terrain features can disrupt or weaken the signal. It's crucial to ensure a clear LOS during the installation process to achieve optimal performance.

Signal Reception and Modem:

The subscriber antenna captures the radio signals transmitted by the tower. These signals are then converted into electrical signals and passed to a modem or wireless router. The modem acts as the interface between the fixed wireless connection and your devices, allowing you to connect multiple devices and access the internet.