

Unlocking the Power of the 6 GHz Band



BROADBAND
WITHOUT
BOUNDARIES

Overview

Coming online in early 2021, the 6 GHz band represents the newest frontier in unlicensed wireless spectrum, providing a large slice of high-capacity spectrum—1,200 MHz—for indoor and outdoor broadband applications. 6 GHz brings fast speeds, low latency and robust signal strength, making it perfect for everything from high-performance home networks to enterprise-wide connectivity and rural fixed wireless. With the FCC’s authorization of standard power outdoor (SPO) use through an Automated Frequency Coordination (AFC) System to protect incumbent operations, the 6 GHz band has unlocked new opportunities for reliable, flexible and speedy unlicensed wireless broadband operations across the U.S.

Key Features



6GHz Band: Located at 5925–7125 MHz on the spectrum “dial”



Large Capacity: Offers fiber-like speeds to homes or businesses



Size: 1,200 megahertz in total



WISPs Use: 850 megahertz allocated for SPO operations



Robust Coverage: Can transmit broadband 1.5 miles or farther, depending on topography and other conditions



SPO Uses: Rural and suburban residences, stadiums, campuses, smart city deployments, convention centers, industrial IoT, hospitals, public safety, etc.



Shared: Other users include indoor Wi-Fi, utility monitoring and licensed backhaul



Unlicensed: Does not require expensive spectrum licenses



Clean and Protected: Shared uses are coordinated by an AFC System, boosting efficient spectrum use and walling-off harmful interference from incumbents



Extends Wi-Fi: Works with Wi-Fi 6 & 7, adding massive capacity to indoor Wi-Fi networks, as well as the existing ecosystem of millions of deployed Wi-Fi devices



Innovators Welcome: Lower costs promote entry of new providers and other innovators



Boosts Economy: 6 GHz band projected to add up to \$1.2 trillion of incremental economic value by 2027¹



Together Even Better: 6 GHz band sits adjacent to the popular 5 GHz band, increasing its reach for ISPs delivering wireless broadband



SPO Ecosystem Expanding: There are nearly 70 SPO-compatible products already approved by the FCC

¹ <https://wififorward.org/wp-content/uploads/2024/09/Assessing-the-Economic-Value-of-Wi-Fi.pdf#page=10>