



Many Shades of WiFi



There is a growing demand for high-tech connected homes with multiple, built-in entertainment and productivity options that blur the lines between where the content originates (TV networks, Internet, home videos) and the device on which it is accessed. Here are some interesting statistics to consider:

- According to Neilson, online video consumption in the U.S. has increased 45% over the last one year
- ComScore says 40% of U.S. households have four or more connectivity devices including TVs, PCs, mobile phones and tablets

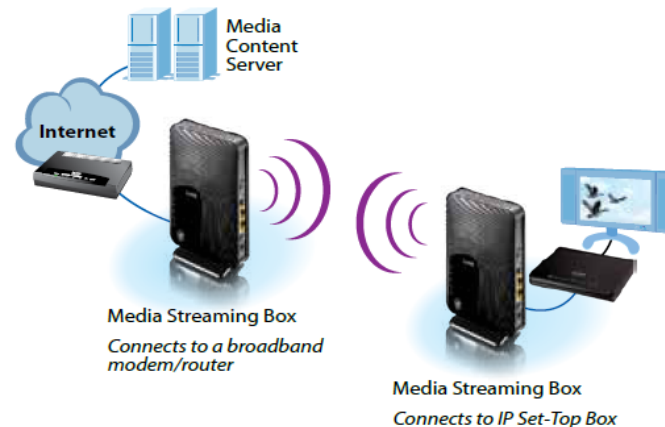
And these numbers don't show signs of slowing down any time soon. Putting these two stats together we get a huge market of families who are consuming an alarming amount of content over multiple connectivity devices. They want to be able to view their content anytime and on any device. These changes have not only increased the consumer appetite for faster broadband but is fueling the demand for home connectivity and storage solutions, and someone who can help them make sense of it all.

Is wireless ready for prime time?

5GHz Band

The regular 802.11n WiFi technology was a huge leap forward with speed of up to 300Mbps but it still wasn't stable enough for reliably streaming HD video. However devices designed with 802.11n standard but using the 5GHz frequency band instead of the more congested 2.4GHz have been extremely successful with streaming HD media content.

ZyXEL offers 5GHz, 802.11n media streamers (WAP5605) which connects multiple devices such as set-top boxes to home entertainment center screens wirelessly. The devices can function in access point and client mode by using the convenient AP/Client mode switch on the unit. Its SmartRange technology enhances wireless performance by enabling multiple WAP5605s clients to transmit wireless signals directly to each other, bypassing the AP.




By connecting media players, set-top boxes and game consoles to the WAP5605, families can enjoy IPTV services and music, videos, photos, and play online games without unsightly wiring arrangements. Each WAP6205 offers two Gigabit Ethernet ports

Even though 5GHz, 11n products have distinct advantages over their 2.4GHz counterparts, the majority of older laptops and mobile devices don't come with the 5GHz WiFi built-in so an additional adapter may be needed for these devices to connect with 5GHz WiFi streamers and routers.

Dual-Band

Another class of premium 802.11n devices offers simultaneous dual-band operation offering best of both worlds. So users can use 2.4Ghz for Internet surfing and 5Ghz for video streaming and gaming.

ZyXEL's premium simultaneous dual-band, 802.11n router – the NBG5715 comes built-in with three dual-band antennas featuring MIMO technology for blazing fast data transfer rates of up to 450 Mbps* simultaneously

	Specifications	
	Network interfaces	Four 10/100/1000 Mbps Ethernet RJ-45 ports with auto MDI/MDIX support
	Internet connections	One 10/100/1000 Mbps Ethernet RJ-45 port with auto MDI/MDIX support
	WLAN features	802.11 a/b/g/n, concurrent 2.4 GHz/5 GHz radio bands, SmartRange support
	Data transfer rate	Up to 450 Mbps* WLAN, 1000 Mbps via Ethernet cable
	Bandwidth management	Advanced QoS, Wi-Fi WMM support
	VPN functions	5 IPsec VPN
	Protocols	PPPoE, DHCP, static IP, DynDNS, UPnP
	Security	DoS, SPI Firewall, WPA, WPA2, WPA-PSK, WPA2-PSK, WEP
	Management	Intuitive user interface, online upgrade firmware
	USB	Two NetUSB™ ports
	Special features	Guest WLAN support, LED light on/off button, two USB eject buttons
	Green features	Wireless on/off button, power on/off switch, wireless scheduling, output power management

on both frequency bands. In addition, advanced QoS traffic prioritization features allow users to take full advantage of their fast fiber broadband connection.

WiFi Router, Access Point (Media Streamers) and Adapter Product Portfolio

	Wireless Home Router Series	Wireless Access Point	Wireless Adapter
Wireless N Media Series	 NBG5715 Simultaneous Dual-Band Wireless N Media Router	 WAP5605 5-GHz Wireless N Media Streaming Box	
Wireless N Series	 NBG4615 Wireless N Gigabit NetUSB Router	 NBG-419N v2 Wireless N NetUSB Router	 WAP3205 Wireless N Access Point
			 NWD2205 Wireless N USB Adapter

60GHz WirelessHD

WirelessHD technology standard is architected and optimized for the sole purpose of wirelessly streaming HD multimedia. It leverages 60 GHz millimeter wave technology, providing the necessary bandwidth for multi-Gigabit data rates, which are required to wirelessly stream reliable, uninterrupted HD video and audio. The 60 GHz spectrum also eliminates interference from other wireless technologies, such as popular 802.11x standards.

Based on this revolutionary technology, ZyXEL Aerobeam WHD6215 is a transmitter/receiver combo that enables consumers to place their HDMI enabled entertainment devices anywhere in the room to wirelessly stream digital content, without worrying about unsightly wires. Simply plug any HDMI® device, including Blu-ray / DVD players, game consoles, smartphones and tablets, into the Aerobeam WirelessHD transmitter and connect the receiver to the TV. No extra configuration is required. The WHD6215 adapters provide full 1080P video playback, including 3D, with no lag or loss in picture quality. It also supports 7.1 surround sound audio for the highest-quality A/V (audio/video) experience available.



What's in it for the Telcos?

A huge opportunity to up sell! Telcos already have their foot in the door via telephony and Internet service, and they can now generate additional revenue by selling these home connectivity solutions and helping guide their subscribers towards a fully connected digital home bliss. In addition to generating new revenue from products and services, this also helps them improve the customer experience since they are the first to get call no matter what IT problem the consumer happens to have. There couldn't be a better example of a win-win situation. Consumers get all their communication and entertainment services from a single trusted technology vendor, and the telcos not only increase their ARPU, they also have a chance to stay close to their biggest assets – their customers!

About ZyXEL

ZyXEL is leading the digital home revolution with a complete portfolio of fiber, xDSL and award-winning LTE broadband gateways, home connectivity and entertainment solutions and smart home devices. Headquartered in Anaheim, California, ZyXEL offers service providers unmatched logistic, sales and technical support by a domestic team of reliable and expert professionals. www.zyxel.com

For free trial samples or for more information, please email us at telco@zyxel.com or call at 1.800.255.4101