

Wi-Fi generations at a glance

	Wi-Fi 5 (802.11ac)	Wi-Fi 6 (802.11ax)	Wi-Fi 6E (802.11ax)	Wi-Fi 7 (802.11be)
Frequency	5 GHz	Dual-band (2.4 GHz, 5 GHz)	Tri-band (2.4, 5, 6 GHz)	
Bandwidths (Channels)	20, 40 , 80, 80+80, 160 MHz			20, 40 , 80, 80+80, 160, 320 MHz
Max data rate	~7 Gbps	~9.6 Gbps		~36 Gbps*
Access (Multiplexing)	OFDM	OFDMA		
Modulation	254 QAM	1024 QAM		4096 QAM
Antenna	DL MU-MIMO (4 x 4)	DL + UL MU-MIMO (8 x 8)		
Security	WPA2	WPA3		WPA3, including updates
Key innovations	40 MHz mandatory	TWT, BSS coloring, Beamforming		Multi Link Operation (MLO), Multi-RU, Puncturing, Deterministic Latency

* Theoretical maximum data rates based on the latest draft of the IEEE 802.11be standard.
** ">5 Gbps Wi-Fi 7 2x2 client speed" - is based on the current draft of the 802.11be specification which specifies the theoretical maximum data rate for a 2x2 device that supports 320 MHz channels, 4096 QAM, and Multi-Link Operation is 5.76 Gbps. Based on an industry-standard assumption of 90% efficiency for new Wi-Fi products operating in the exclusive 6 GHz band, the resulting estimated maximum over the air 2x2 client speed would be 5.19 Gbps.