



**IEEE Standard for Information Technology—
Telecommunications and Information Exchange between Systems
Local and Metropolitan Area Networks—
Specific Requirements**

Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications

Amendment 2: Enhancements for Extremely High Throughput (EHT)

IEEE Computer Society

Developed by the
LAN/ MAN Standards Committee

IEEE Std 802.11be™-2024
(Amendment to IEEE Std 802.11™-2024,
as amended by 802.11bh™-2024)

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Approved 26 September 2024
IEEE SA Standards Board

Abstract: This amendment defines standardized modifications to both the IEEE Std 802.11 physical layers (PHY) and the Medium Access Control Layer (MAC) that enable at least one mode of operation capable of supporting a maximum throughput of at least 30 Gbit/s, as measured at the MAC data service access point (SAP), with carrier frequency operation between 1 and 7.250 GHz while ensuring backward compatibility and coexistence with legacy IEEE Std 802.11 compliant devices operating in the 2.4 GHz, 5 GHz, and 6 GHz bands. This amendment defines at least one mode of operation capable of improved worst case latency and jitter.

Keywords: EHT, extremely high throughput, jitter, IEEE 802.11™, IEEE 802.11be™, IEEE 802.11bh™, latency, MAC, medium access control, PHY, physical layer, wireless local area network, WLAN

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This amendment defines standardized modifications to both the IEEE Std 802.11 physical layers (PHY) and the Medium Access Control Layer (MAC) that enable at least one mode of operation capable of supporting a maximum throughput of at least 30 Gbit/s, as measured at the MAC data service access point (SAP), with carrier frequency operation between 1 and 7.250 GHz while ensuring backward compatibility and coexistence with legacy IEEE Std 802.11 compliant devices operating in the 2.4 GHz, 5 GHz, and 6 GHz bands. This amendment defines at least one mode of operation capable of improved worst case latency and jitter.

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