

2.4 GHz Wi-Fi Technology

- 802.11b
 - Data Rate (Mbps): 1, 2, 5.5, 11 [1]
 - Frequency: 2400 MHz to 2483.5 MHz [1]
 - Channel Width: 20 MHz [1]
 - Maximum Power (mW): 1000 [1]
 - Band: ISM [1]
 - Bandwidth Allocation: 83.5 MHz [1]
 - Spatial Streams: 1 [1]
 - Modulation Technology: DSSS [1]
 - Modulation: BPSK, QPSK, CCK [1]
 - Total Channels: 11 [2]
 - Non-overlapping Channels: 3 [2]
 - ❖ Ch 1 (2412 MHz)
 - ❖ Ch 6 (2437 MHz)
 - ❖ Ch 11 (2462 MHz)
- 802.11g
 - Data Rate (Mbps): 54 Mbps [1]
 - Frequency: 2400 MHz to 2483.5 MHz [1]
 - Channel width: 20 MHz [1]
 - Maximum Power (mW): 1000 [1]
 - Band: ISM [1]
 - Bandwidth Allocation: 83.5 MHz [1]
 - Spatial Streams: 1 [1]
 - Modulation Technology: OFDM, DSSS [1]
 - Modulation: CCK, QAMo [1]
 - Total Channels: 11 [2]
 - Non-overlapping Channels: 3 [2]
 - ❖ Ch 1 (2412 MHz)
 - ❖ Ch 6 (2437 MHz)
 - ❖ Ch 11 (2462 MHz)
- 802.11n
 - Data Rate (Mbps): 144 Mbps to 600 Mbps [1]
 - Frequency: 2.4 GHz, 5 GHz [1]
 - Channel Width: 20 MHz or 40 MHz [1]
 - Maximum Power (mW): 1000 [1]
 - Band: ISM, UNII [1]
 - Bandwidth Allocation: 83.5 MHz [1]
 - Spatial Streams: 1, 2, 3, 4 [1]

- o Modulation Technology: OFDM/OFDMA with MIMO [1]
- o Modulation: CCK, QAM [1]
- o Total Channels: 11 [2]
- o Non-overlapping Channels: 3 [2]
 - ❖ Ch 1 (2412 MHz)
 - ❖ Ch 6 (2437 MHz)
 - ❖ Ch 11 (2462 MHz)

References:

- [1] "Topic 10: License-Exempt Wireless Applications for Public Safety." Federal Communications Commission. Web. 27 May 2015.
<https://transition.fcc.gov/pshs/techttopics/techttopics10.html>
- [2] "WLAN Radio Frequency Design Considerations." Cisco Systems, Inc., 9 Dec. 2008. Web. 2 June 2015.
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