



FCC 2.4 GHz BAND RULES (POINT-TO-MULTIPOINT)
Maximum = +36dBm (4watts)

Maximum Power from Intentional Radiator *1	Maximum Antenna Gain (dBi)	EIRP (dBm)	EIRP (watts)
30dBm or 1 watt	6	36	4
27dBm or 500mW	9	36	4
24dBm or 250mW	12	36	4
21dBm or 125mW	15	36	4
18dBm or 63mW	18	36	4
15dBm or 32mW	21	36	4
12dBm or 16mW	24	36	4

*1 The FCC terminology of Intentional Radiator is the transmitter power of the wireless equipment, such as a wireless access point, router or bridge.

FCC 2.4 GHz BAND RULES (POINT-TO-POINT)
Maximum = See FCC Special Rule *2

Maximum Power from Intentional Radiator *1	Maximum Antenna Gain (dBi)	EIRP (dBm) *3	EIRP (watts) *3
30dBm or 1 watt	6	36	4
29dBm or 800mW	9	38	6.3
28dBm or 630mW	12	40	10
27dBm or 500mW	15	42	16
26dBm or 400mW	18	44	25
25dBm or 316mW	21	46	39.8
24dBm or 250mW	24	48	63
23dBm or 200mW	27	50	100
22dBm or 160mW	30	52	158

*1 The FCC terminology of Intentional Radiator is the transmitter power of the wireless equipment, such as a wireless access point, router or bridge.

*2 The FCC ruling states that for every 1dBi the Intentional Radiator is reduced below the initial 30dBm that the antenna gain may be increased from the initial 6dBi by 3dB.

*3 *Equivalent Isotropically Radiated Power* (EIRP) is terminology for the total RF power radiated by the antenna.



FCC 5 GHz BANDS AND RULES

BAND	Frequency (GHz)	Channels	Permitted Use Location	Point-to-Point Max. Intentional Radiator Power *1	Point-to-Point Maximum EIRP *2	Point-to-MultiPoint Intentional Radiator Power *1	Point-to-MultiPoint Maximum EIRP *2
UNII (Low)	5.15-5.25	36, 40, 44, 48	Indoor Only	40mW 16dBm	160mw 22dBm	40mW 16dBm *4	160mW 22dBm
UNII-2 (Middle)	5.25-5.35	52, 56, 60, 64	Indoor or Outdoor	200mW 23dBm	800mW 29dBm	200mW 23dBm *4	800mW 29dBm
UNII-2 Extended	5.470-5.725	100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140	Indoor or Outdoor	200mW 23dBm	800mW 29dBm	200mW 23dBm *4	800mW 29dBm
UNII-3 (Upper)	5.725-5.825	149 to 161	Typical Outdoor	Antenna to 23dBi *3	200 watts	800mW 29dBm *4	3200mW 35dBm

*1 The FCC terminology of Intentional Radiator is the transmitter power of the wireless equipment, such as a wireless access point, router or bridge.

*2 *Equivalent Isotropically Radiated Power* (EIRP) is terminology for the total RF power radiated by the antenna.

*3 Fixed point-to-point in the UNII-3 band may utilize directional antennas up to 23dBi gain without any corresponding reduction of the Intentional Radiator's RF output power. If antennas higher than 23dBi gain are utilized, a reduction of 1 dB is required for every 1 dB increase in the antenna gain above 23dBi.

*4 The FCC point to multipoint rule is the maximum power from the intentional radiator + maximum antenna gain of 6 dBi. For every 1 dB gain over 6 dB the power of the intentional radiator must be reduced by 1 dB.

*5 FCC Part 15.407 defines the power limits. For example, in the 5.15 – 5.25 GHz band the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW or 4 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 4 dBm in any 1–MHz band. We have shown the lesser amount of 40mW as the IEEE documents have done. We have applied the same concept to the other bands.