



## Channels and Antenna Settings

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This appendix lists the IEEE 802.11g (2.4-GHz) channels, maximum power levels, and antenna gains supported by the world's regulatory domains.

The following topics are covered in this appendix:

- [Channels, page A-2](#)
- [Maximum Power Levels and Antenna Gains, page A-3](#)

# Channels

## IEEE 802.11g (2.4-GHz Band)

The channel identifiers, channel center frequencies, and regulatory domains of each IEEE 802.11g 22-MHz-wide channel are shown in [Table A-1](#).

**Table A-1** Channels for IEEE 802.11g

Channel Identifier	Center Frequency (MHz)	Regulatory Domains							
		Americas (–A)		EMEA (–E)		Israel (–I)		Japan (–J)	
		CCK	OFDM	CCK	OFDM	CCK	OFDM	CCK	OFDM
1	2412	X	X	X	X	–	–	X	X
2	2417	X	X	X	X	–	–	X	X
3	2422	X	X	X	X	–	–	X	X
4	2427	X	X	X	X	–	–	X	X
5	2432	X	X	X	X	X	X	X	X
6	2437	X	X	X	X	X	X	X	X
7	2442	X	X	X	X	X	X	X	X
8	2447	X	X	X	X	X	X	X	X
9	2452	X	X	X	X	–	–	X	X
10	2457	X	X	X	X	–	–	X	X
11	2462	X	X	X	X	–	–	X	X
12	2467	–	–	X	X	–	–	X	X
13	2472	–	–	X	X	–	–	X	X
14	2484	–	–	–	–	–	–	X	–



**Note**

Mexico is included in the Americas (–A) regulatory domain; however, channels 1 through 8 are for indoor use only while channels 9 through 11 can be used indoors and outdoors. Users are responsible for ensuring that the channel set configuration is in compliance with the regulatory standards of Mexico.

# Maximum Power Levels and Antenna Gains

## IEEE 802.11g (2.4-GHz Band)

An improper combination of power level and antenna gain can result in equivalent isotropic radiated power (EIRP) above the amount allowed per regulatory domain. [Table A-2](#) indicates the maximum power levels and antenna gains allowed for each IEEE 802.11g regulatory domain.



### Note

To meet regulatory restrictions, the external antenna BR1300 configuration and the external antenna must be professionally installed. The network administration or other IT professional responsible for installing and configuring the unit is a suitable professional installer. Following installation, access to the unit should be password protected by the network administrator to maintain regulatory compliance.

**Table A-2** Maximum Power Levels Per Antenna Gain for IEEE 802.11g

Regulatory Domain	Antenna Gain (dBi)	Maximum Power Level (mW)	
		CCK	OFDM
Americas (-A) (4 W EIRP maximum)	5.2 (Omni)	100	30
	9 (Patch)	100	30
	10 (Yagi)	100	30
	11 (Omni)	—	—
	12 (Omni)	100	30
	13 (Integrated patch)	100	30
	13.5 (Yagi)	100	30
	14 (Sector)	50	20
	21 (Dish)	20	10
EMEA (-E) (100 mW EIRP maximum)	5.2 (Omni)	20	10
	9 (Patch)	10	5
	10 (Yagi)	10	5
	11 (Omni)	—	—
	12 (Omni)	5	1
	13 (Integrated patch)	5	1
	13.5 (Yagi)	5	1
	14 (Sector)	1	1
	21 (Dish)	1 <sup>1</sup>	—

Regulatory Domain	Antenna Gain (dBi)	Maximum Power Level (mW)	
		CCK	OFDM
Japan (-J) (10 mW/MHz EIRP maximum)	5.2 (Omni)	10	10
	9 (Patch)	10	10
	10 (Yagi)	10	10
	11 (Omni)	10	10
	12 (Omni)	10	10
	13 (Integrated patch)	10	10
	13.5 (Yagi)	10	10
	14 (Sector)	10	10
	21 (Dish)	10	10

1. A minimum of 2 dBi cable loss must be used for this configuration.

## Changing the Access Point/Bridge's Radio Transmit Power

See the [“Configuring Radio Transmit Power”](#) section on page 6-6 for instructions about how to change the access point/bridge's radio output power.