



## Channels and Antenna Settings

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 B-1](#)
- [Maximum Power Levels and Antenna Gains, page B-3](#)

See the “[Configuring Radio Transmit Power \(2.4-GHz Radio Only\)](#)” in the “[Configuring Radio Settings](#)” chapter for instructions about how to change the radio output power.

### Channels

This section describes the channels for 802.11b/g (2.4-GHz) and the 4.9-GHz bands.

### 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 B-1](#).

**Table B-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

**Table B-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
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.

## 4.9-GHz Band

The channel identifiers, channel center frequencies, and channel width are shown in [Table B-2](#).

**Table B-2** Channels, Center Frequencies, and Channel Widths

Channel	Center Frequency	Channel Width
1	4940.5	not supported
2	4941.5	not supported
3	4942.5	5-MHz
4	4943.5	not supported
5	4944.5	not supported
6	4947.5	5-MHz
7	4952.5	5-MHz, 10-MHz, or 20-MHz
8	4957.5	5-MHz
9	4962.5	5-MHz or 10-MHz
10	4967.5	5-MHz
11	4972.5	5-MHz, 10-MHz, or 20-MHz
12	4977.5	5-MHz
13	4982.5	5-MHz or 10-MHz
14	4985.5	not supported
15	4986.5	5-MHz
16	4987.5	not supported
17	4988.5	not supported
18	4989.5	not supported

# 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 B-3](#) 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 B-3** 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)	2.2	100	30
	6	100	30
	6.5	100	30
	10	100	30
	13.5	100	30
	15	50	20
	21	20	10
EMEA (-E) and Israel(-I) (100 mW EIRP maximum)	2.2	50	30
	6	30	10
	6.5	20	10
	10	10	5
	13.5	5	5
	15	5	1
	21	1	—
Japan (-J) (10 mW/MHz EIRP maximum)	2.2	5	5
	6	5	5
	6.5	5	5
	10	5	5
	13.5	5	5
	15	5	5
	21	5	5

