# **FCC Radiation Exposure Statement**



**WARNING**: The radiated output power of the Dell Wireless WLAN Card devices is far below the FCC radio frequency exposure limits. Nevertheless, the Dell Wireless WLAN Card devices should be used in such a manner that the potential for human contact during normal operation is minimized. To avoid the possibility of exceeding the FCC radio frequency exposure limits, you should keep a distance of at least 20 cm between you (or any other person in the vicinity) and the antenna that is built into the notebook. To determine the location of the antenna within your portable computer, check the information posted on the general Dell support site at http://support.dell.com.

This device has also been evaluated for and shown compliant with the FCC RF exposure limits under portable exposure conditions (antennas are within 20 cm of a person's body) when installed in certain specific OEM configurations. Details of the authorized configurations can be found at http://www.fcc.gov/oet/fccid/help.html by entering the FCC ID number on the device.

#### **Interference Statement**

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference. 1)
- 2) This device must accept any interference received, including interference that may cause undesired operation.

**Notice:** The FCC regulations provide that changes or modifications not expressly approved by Dell Inc. could void your authority to operate this equipment.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the system with respect to the receiver.
- Move the system away from the receiver.
- Plug the system into a different outlet so that the system and the receiver are on different branch circuits.

If necessary, consult a representative of Dell Inc. or an experienced radio/television technician for additional suggestions.



NOTE: This Dell Wireless WLAN Card must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. Any other installation or use will violate FCC Part 15 regulations. Modifications not expressly approved by Dell could void your authority to operate the equipment.

This device must not be co-located or operating in conjunction with any other antenna or transmitter.

If you elected to purchase an IEEE 802.11 b/g card which does not utilize the 5 GHz spectrum, then the statements below do not apply.

#### **Radio Frequency Interference Requirements**



# **WARNING:**

This device is restricted to indoor use due to its operation in the 5.15 GHz to 5.25 GHz frequency range. The FCC requires this product to be used indoors for the frequency range 5.15 GHz to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.

High power radars are allocated as primary users of the 5.25 GHz to 5.35 GHz and 5.65 GHz to 5.85 GHz bands. These radar stations can cause interference with this device, or can cause damage to this device, or both.

### **FCC Radiation Exposure Statement**



**MARNING:** The radiated output power of the Dell Mobile Broadband device is far below the FCC radio frequency exposure limits. Nevertheless, the Dell Mobile Broadband device should be used in such a manner that the potential for human contact during normal operation is minimized. This device has been evaluated for and shown compliant with the FCC RF exposure limits under portable exposure conditions (antennas are within 20 cm of a person's body) when installed in certain specific OEM configurations. This device has also been evaluated and shown compliant with the FCC RF Exposure limits under mobile exposure conditions (antennas are greater than 20cm from a person's body). Details of the authorized configurations can be found at

https://fjallfoss.fcc.gov/oetcf/eas/reports/GenericSearch.cfm by entering the FCC ID number on the device.

#### **Interference Statement**

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- This device must accept any interference received, including interference 2) that may cause undesired operation.

**Notice:** The FCC regulations provide that changes or modifications not expressly approved by Dell Inc. could void your authority to operate this equipment.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the system with respect to the receiver.
- Move the system away from the receiver.
- Plug the system into a different outlet so that the system and the receiver are on different branch circuits.

If necessary, consult a representative of Dell Inc. or an experienced radio/television technician for additional suggestions.

NOTE: This Dell Mobile Broadband device must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. Any other installation or use will violate FCC Part 15 regulations. Modifications not expressly approved by Dell could void your authority to operate the equipment.

The Dell Wireless WLAN Card products are designed to be interoperable with any wireless LAN product that is based on direct sequence spread spectrum (DSSS) radio technology and orthogonal frequency division multiplexing (OFDM) and to comply with the following standards:

- IEEE 802.11a Standard on 5 GHz Wireless LAN
- IEEE 802.11b-1999 Standard on 2.4 GHz Wireless LAN
- IEEE 802.11g Standard on 2.4 GHz Wireless LAN
- Wireless Fidelity (Wi-Fi) certification, as defined by the WECA (Wireless Ethernet Compatibility Alliance)

# **Safety**

The Dell Wireless WLAN Card, like other radio devices, emits radio frequency electromagnetic energy. The level of energy emitted by this device, however, is less than the electromagnetic energy emitted by other wireless devices such as mobile phones. The Dell Wireless WLAN Card wireless device operates within the guidelines found in radio frequency safety and recommendations. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature. In some situations or environments, the use of the Dell Wireless WLAN Card wireless devices may be restricted by the proprietor of the building or responsible representatives of the applicable organization.

Examples of such situations include the following:

- Using the Dell Wireless WLAN Card equipment on board airplanes, or
- Using the Dell Wireless WLAN Card equipment in any other environment where the risk of interference with other devices or services is perceived or identified as being harmful.

If you are uncertain of the policy that applies to the use of wireless devices in a specific organization or environment (an airport, for example), you are encouraged to ask for authorization to use the Dell Wireless WLAN Card wireless device before you turn it on.



# **A** Explosive Device Proximity Warning:

Do not operate a portable transmitter (such as a wireless network device) near unshielded blasting caps or in an explosive environment unless the device has been modified to be qualified for such use.



# Use on Aircraft Caution:

Regulations of the FCC and FAA prohibit airborne operation of radio-frequency wireless devices because their signals could interfere with critical aircraft instruments.

# **Regulatory Information**

The Dell Wireless WLAN Card wireless network device must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. Dell Inc. is not responsible for any radio or television interference caused by unauthorized modification of the devices included with this Dell Wireless WLAN Card kit, or the substitution or attachment of connecting cables and equipment other than that specified by Dell Inc. The correction of interference caused by such unauthorized modification, substitution or attachment is the responsibility of the user. Dell Inc. and its authorized resellers or distributors are not liable for any damage or violation of government regulations that may arise from the user failing to comply with these guidelines.

# **Radio Approvals**

It is important to ensure that you only use your radio device in countries where the device is approved for use. To determine whether you are allowed to use your wireless network device in a specific country, check to see if the radio type number that is printed on the identification label of your device or listed on the radio approval list posted on the general Dell support site at <a href="http://support.dell.com">http://support.dell.com</a>.

**Electromagnetic Interference (EMI)** is any signal or emission, radiated in free space or conducted along power or signal leads, that endangers the functioning of radio navigation or other safety service or seriously degrades, obstructs, or repeatedly interrupts a licensed radio communications service. Radio communications services include but are not limited to AM/FM commercial broadcast, television, cellular services, radar, air-traffic control, pager, and Personal Communication Services (PCS). These licensed radio services, and unlicensed radio services, such as WLAN or Bluetooth, along with unintentional radiators such as digital devices, including computer systems, contribute to the electromagnetic environment.

**Electromagnetic Compatibility (EMC)** is the ability of items of electronic equipment to function properly together in the electronic environment. While this computer system has been designed and determined to be compliant with regulatory agency limits for EMI, there is no guarantee that interference will not occur in a particular installation.

Dell<sup>TM</sup> products are designed, tested, and classified for their intended electromagnetic environment. These electromagnetic environment classifications generally refer to the following harmonized definitions:

• Class B products are intended for use in residential/domestic environments but may also be used in non-residential/non-domestic environments.

Note: The residential/domestic environment is an environment where the use of broadcast radio and television receivers may be expected within a distance of 10 m from where this product is used.

• Class A products are intended for use in non-residential/non-domestic environments. Class A products may also be utilized in residential/domestic environments but may cause interference and require the user to take adequate corrective measures.

If this equipment does cause interference with radio communications services, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the computer with respect to the receiver.
- Move the computer away from the receiver.
- Plug the computer into a different outlet so that the computer and the receiver are on different branch circuits.

If necessary, consult a Dell Technical Support representative or an experienced radio/television or EMC technician for additional suggestions.

Information Technology Equipment (ITE), including peripherals, expansion cards, printers, input/output (I/O) devices, monitors, and so on, that are integrated into or connected to the system should match the electromagnetic environment classification of the computer system.

A Notice about Shielded Signal Cables: Use only shielded cables for connecting peripherals to any Dell<sup>TM</sup> device to reduce the possibility of interference with radio communications services. Using shielded cables ensures that you maintain the appropriate EMC classification for the intended environment. For parallel printers, a cable is available from Dell<sup>TM</sup>. If you prefer, you can order a cable from Dell<sup>TM</sup> on the World Wide Web at <a href="https://www.dell.com">www.dell.com</a>.

# FCC, Class B

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.

**Notice:** The FCC regulations provide that changes or modifications not expressly approved by Dell Inc. could void your authority to operate this equipment.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the antenna of the radio/television receiver.
- Increase the separation between this equipment and the radio/television receiver.
- Plug the equipment into a different outlet so that the equipment and the radio/television receiver are on different power mains branch circuits.
- Consult a representative of Dell<sup>TM</sup> or an experienced radio/television technician for additional suggestions.

The following information is provided on the device or devices covered in this document in compliance with FCC regulations:

Product name:

Please refer to the product-specific <u>Product Safety</u>, <u>EMC and Environmental Datasheet</u> for the Regulatory Model and Reference Number identification of products covered by an FCC Declaration of Conformity.

This equipment's unique regulatory compliance identification is provided by the Regulatory Model and Reference Number. These regulatory compliance identification markings are on the regulatory label affixed to your equipment and should not be confused with marketing name or model of the equipment. To facilitate positive identification, request for regulatory compliance information for this equipment should include the Regulatory Model and Reference Number.

Company name:

Dell Inc. is the responsible party or acting as a point-of-contact for the responsible party of a Dell-branded ODM/OEM product. For an EMC compliance issue or a regulatory inquiry, please use the following contact information:

Dell Inc.
Worldwide Regulatory Compliance, Engineering and Environmental Affairs
One Dell Way PS4-30
Round Rock, Texas 78682 USA
512-338-4400

For a copy of the FCC Declaration of Conformity, please send an e-mail to <u>Regulatory Compliance@dell.com</u> providing the Marketing Name, Regulatory Model and Reference Number for the applicable product(s) as listed on the <u>Product Safety, EMC and Environmental Datasheet</u>, and/or as listed on the Regulatory Label affixed to your product.