



Cisco Edge 340 Series Installation Guide

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About this Guide

This guide describes how to install the Cisco Edge 340 Series device and describes the LEDs and ports. For configuration information, see the Cisco Edge 340 Series documentation on Cisco.com. For system requirements, important notes, limitations, open and resolved bugs, and documentation updates, see the release notes on Cisco.com.



Cisco Edge 340 Series Accessories

The following list shows the accessories that you can purchase for the Cisco Edge 340 Series device:

- Power adapter
- Power cord
- Power cord retainer
- WiFi external antenna
- Console cable with RJ45 and DB9F
- RS-232 cable for Digital Media Player (DMP) and Cisco LCD connectivity
- Infrared Receiver (IR) remote control
- IR extender


Note

All the accessories, except the Cisco Edge 340 Series chassis, should be purchased individually, and are not included by default with the Cisco Edge 340 Series.


Note

Verify that you have received the items you have purchased. If any item is missing or damaged, contact your Cisco representative or reseller.

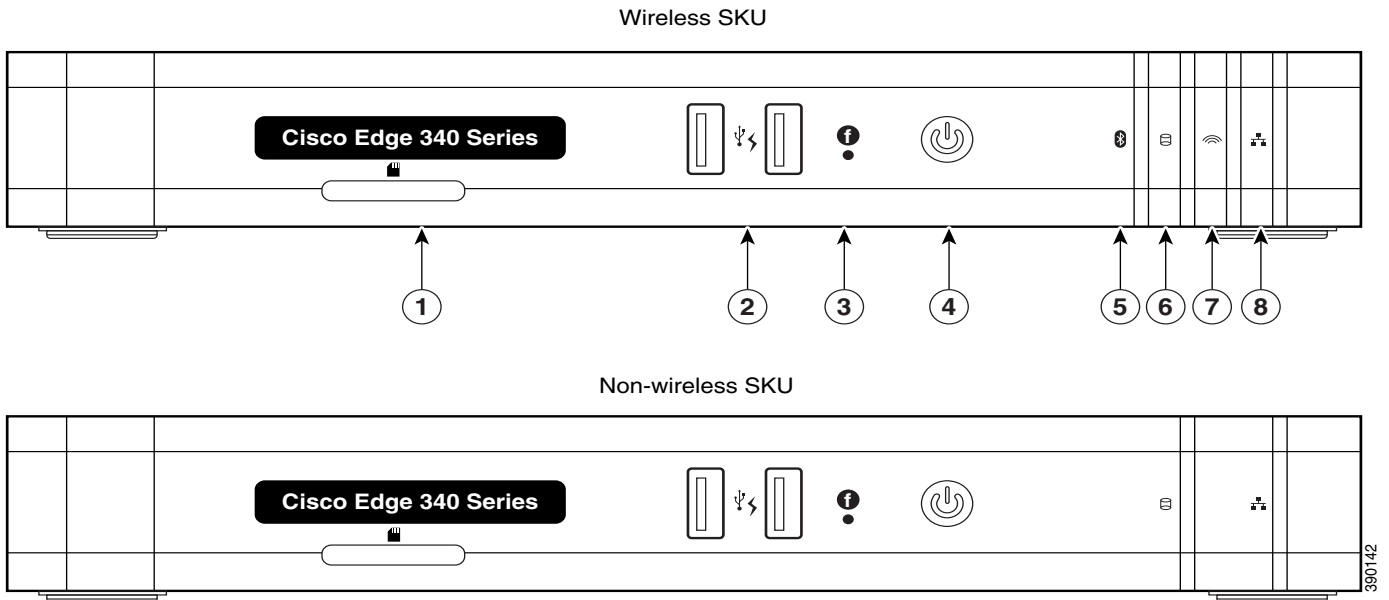
Overview of the Cisco Edge 340 Series

The Cisco Edge 340 Series is available in two variants: wireless SKU and non-wireless SKU. The wireless SKU supports both Wi-Fi and Bluetooth, while the non-wireless SKU supports neither.

Table 1 *Cisco Edge 340 Series Models*

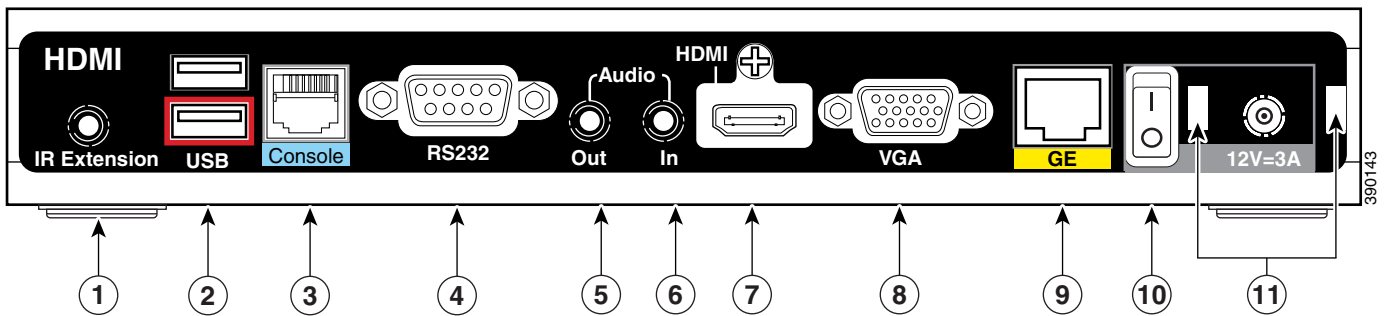
Model No.	Description
CS-E340W	Cisco Edge 340 Series (wireless)
CS-E340	Cisco Edge 340 Series (non-wireless)

Figure 1 Cisco Edge 340 Series—Front panel



1	SD card slot	5	Bluetooth status
2	USB ports	6	Storage status
3	Factory mode pinhole	7	Wifi status
4	Power button	8	Gigabit Ethernet (uplink) status

Figure 2 Cisco Edge 340 Series—Rear Panel



1	IR extension	7	HDMI port
2	USB ports	8	VGA port
3	Console port	9	Gigabit Ethernet port
4	RS-232 port	10	Power switch
5	Audio out port	11	Power cord retainer hole
6	Audio in port		

Port Descriptions

USB

There are four USB 2.0 Type A ports. Two of them are on the front panel, and two on the rear panel. When the Cisco Edge 340 is powered by external power adapter, all four USB ports are enabled. The port marked with red outline on the rear panel can provide up to 5W power to a connected device. Each of the other three USB ports can provide up to 2.5W power. When the Cisco Edge 340 is powered by PoE or PoE+ switch, only the two USB ports on the front panel are enabled, and each can provide up to 2.5W power. The two USB ports on the rear panel are disabled.

You can connect a wired USB keyboard and mouse, a wireless USB receiver for a keyboard and mouse, a USB camera, or a USB thumb drive.

Console

The Cisco Edge 340 Series provides one console port. You can order a Cisco console cable to connect the unit and enter the Clish environment.

RS-232

One male DB9 connector (DCE mode) is supported so that the Cisco Edge 340 Series can support access and configuration of monitors (DTE mode) via RS232.

Audio Out

You can connect headphones or external speakers that use a 3.5-mm connector.

Audio In

You can connect a microphone that uses a 3.5-mm connector.

HDMI

The HDMI port can support 720p and 1080p HD video output with the maximum resolution of 1920x1200.

**Note**

This product incorporates HDMI technology

HDMI[®]
HIGH-DEFINITION MULTIMEDIA INTERFACE

HDMI, the HDMI Logo, and High-Definition Multimedia Interface are or registered trademarks registered trademarks of HDMI Licensing LLC in the United States and other countries.

VGA

The VGA port can support 720p and 1080p HD video output with the maximum resolution of 1920x1200.

Gigabit Ethernet

The Gigabit Ethernet uplink port provides a 10/100/1000 Mb/s connection to other devices.

Wireless Features

WiFi

Supports 802.11a/b/g/n dual-band wireless AP or client.

Bluetooth

Supports Bluetooth 4.0 and Human Interaction Design Protocol (HIDP) for remote control or input devices.

Power Management

Wake on LAN

The Cisco Edge 340 Series supports Wake on LAN when it is in the sleep mode or the soft off mode. The system can be woken up via an Ethernet message, and changed to the full on mode.

PoE PD (IEEE 802.3at)

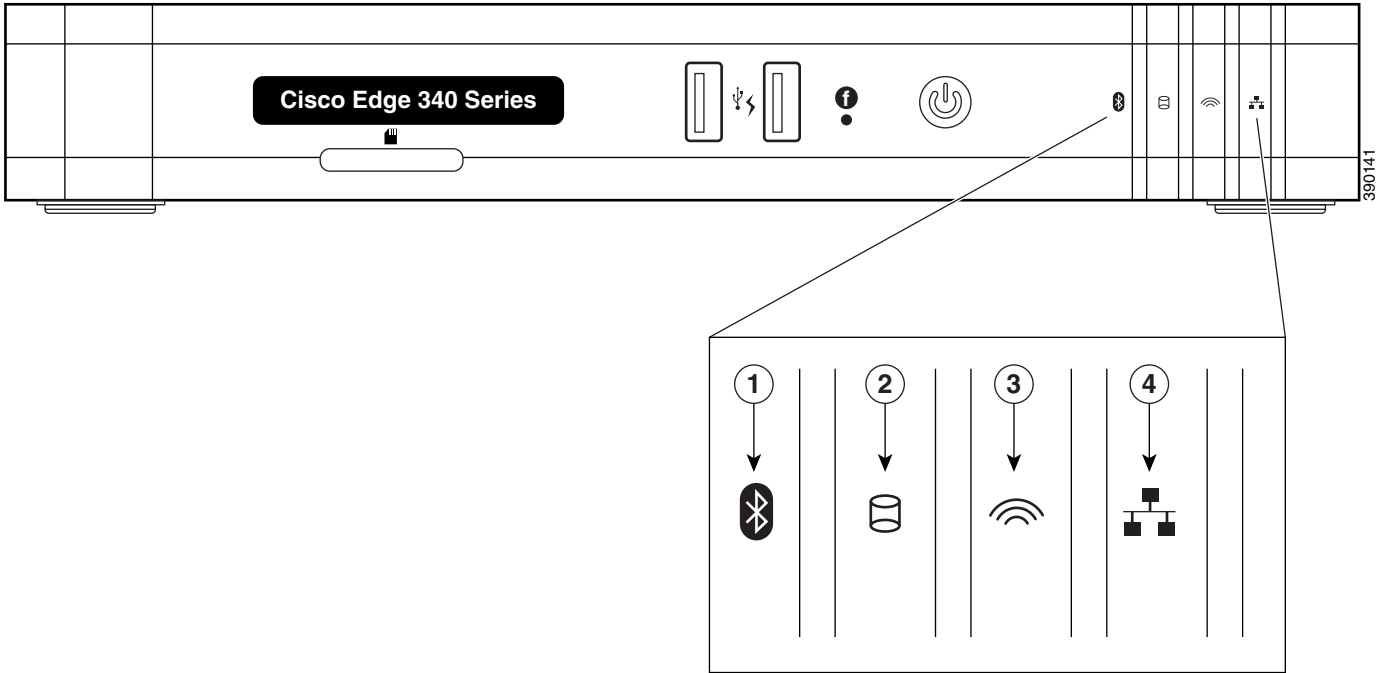
The Power Over Ethernet (PoE) solution for a Powered Device (PD) describes a standardized system that transfers electrical power along with data, on the Ethernet cable. The Cisco Edge 340 Series supports PoE PD so that the device can be powered on from the Power-Sourcing Equipment (PSE) via the Ethernet cable when the external power supply is not connected. Given the power consumption of the Cisco Edge 340 Series, the IEEE 802.3at (the power available at PD is 25.50W) PSE will be supported.

The Cisco Edge 340 Series can be powered by an IEEE 802.3af (the power available at PD is 12.95W) PSE. But if you use the USB ports, the total current might be over the maximum power current of the IEEE 802.3af PSE, and the overcurrent event will be triggered. The PSE will shut down the power of the Cisco Edge 340 Series and then perform another round of detection.

LEDs

Figure 3 shows the LEDs on the front panel of the Cisco Edge 340 Series.

Figure 3 Cisco Edge 340 Series LEDs on the Front Panel



1	Bluetooth ¹	3	WiFi ¹
2	Storage status	4	Gigabit Ethernet uplink

1. Only for the CS-E340W Series

Table 2 shows the color and meaning of each LED.

Table 2 LEDs

LED	Color	Meaning
Power (behind power button)	Off	There is no power.
	Blinking blue	System is in Power-on self test (POST) stage.
	Blinking red	System POST fails.
	Blinking green	System is in the factory mode.
	Solid blue	System is operating normally.
	Solid red	System is in the soft off mode.
	Solid green	System is in the sleep mode.

Table 2 **LEDs (continued)**

LED	Color	Meaning
Gigabit Ethernet	Off	No link.
	Blue	Link up.
	Blinking blue	Activity.
WiFi (AP and client)	Off	WiFi is disabled.
	Solid blue	WiFi is enabled and functioning.
	Blinking blue	WiFi is transmitting data.
Bluetooth	Off	Bluetooth is disabled.
	Solid blue	Bluetooth is enabled and functioning.
	Blinking blue	Bluetooth is transmitting data.
Storage	Off	Storage is not active.
	Blinking blue	Storage is active.

Installing the Cisco Edge 340 Series

You can install the Cisco Edge 340 Series on a wall or a pillar, a metal pole, or a ceiling T-joint by using the wall-mount kit. You can also install the Cisco Edge 340 Series on almost any Video Electronics Standards Association (VESA)-compliant flat-panel display that is attached to a third-party VESA bracket. Besides, you can mount the Cisco Edge 340 Series on a desk or table vertically by using the desktop-mount bracket.

Equipment That You Need

- Phillips screwdriver
- Scratch awl or other sharp-pointed object (wall-mount)
- Electric drill with a 6-mm drill bit (wall-mount)
- Crescent wrench or socket wrench
- Pencil
- Bubble level or laser level

Before You Begin

Before installing the Cisco Edge 340 Series, verify that these guidelines are met:

- Front clearance so that the LEDs can be seen.
- AC power cord reaches from the AC power outlet to the rear-panel connector.
- Cabling is away from sources of electrical noise, such as radios, power lines, and fluorescent lighting. Make sure that the cabling is safely away from other devices that might damage the cables.
- Airflow around the Cisco Edge 340 Series is unrestricted.
- Temperature around the unit does not exceed 45°C.

- Humidity around the Cisco Edge 340 does not exceed 85 percent.
- Altitude at the installation site is below 2000m.

Warning Statements



Warning

IMPORTANT SAFETY INSTRUCTIONS

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device. Statement 1071

SAVE THESE INSTRUCTIONS



Warning

In order to comply with FCC radio frequency (RF) exposure limits, antennas should be located at a minimum of 7.9 inches (20 cm) or more from the body of all persons. Statement 332



Warning

**This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than:
20A** Statement 1005



Warning

The plug-socket combination must be accessible at all times, because it serves as the main disconnecting device. Statement 1019



Warning

Only trained and qualified personnel should be allowed to install, replace, or service this equipment. Statement 1030



Warning

Ultimate disposal of this product should be handled according to all national laws and regulations. Statement 1040



Warning

**For connections outside the building where the equipment is installed, the following ports must be connected through an approved network termination unit with integral circuit protection:
10/100/1000 Ethernet** Statement 1044

**Warning**

To prevent the system from overheating, do not operate it in an area that exceeds the maximum recommended ambient temperature of: 113°F (45°C) Statement 1047

**Warning**

Installation of the equipment must comply with local and national electrical codes. Statement 1074

**Warning**

To prevent airflow restriction, allow clearance around the ventilation openings to be at least: 3 inches (7.6 cm) Statement 1076

**Caution**

Be aware of the size and weight of the Cisco Edge 340 Series when mounting. Ensure that the mounting location has a stable flat surface and can safely support the weight of the Cisco Edge 340 Series.

Installing the Cisco Edge 340 Series on a Wall, Pole, or Ceiling

**Warning**

Read the wall-mounting instructions carefully before beginning installation. Failure to use the correct hardware or to follow the correct procedures could result in a hazardous situation to people and damage to the system. Statement 378

You can use the wall-mount kit to mount the Cisco Edge 340 Series to:

- A wall or pillar (concrete, plaster, or drywall)
- A suspended grid ceiling T-joint
- A metal pole

For more information and detailed installation procedures, see [Mounting the Kit Assembly \(Wall, Pole, and Ceiling Mount\) for Cisco Edge 340 Series](#).

Install the Cisco Edge 340 Series on a Flat-Panel Display

You can use your display-mounting kit to install a Cisco Edge 340 to almost any VESA-compliant flat-panel display that is attached to a third-party VESA bracket. You can mount your Cisco Edge 340 Series above or below the flat-panel display, whether the display is oriented in landscape mode (horizontal) or portrait mode (vertical).

**Note**

See the manufacturer documentation pertaining to your display to learn if its casing is VESA compliant and, if it is, where you can obtain a compatible VESA bracket for it. Cisco does not sell VESA brackets or kits.

The LCD-mount plates for this product might not be long enough to mount your mounting kit to an extremely large flat-panel display even if that display is VESA compliant.

For more information and detailed installation procedures, see [Mounting the Kit Assembly \(Display Mount\) for Cisco Edge 340 Series](#).

Installing the Cisco Edge 340 Series on a Desk or Table

You can use your desktop-mounting kit to install a Cisco Edge 340 on a desk or table vertically by using the desktop-mount bracket.

For more information and detailed installation procedures, see [Mounting the Kit Assembly \(Desktop Mount\) for Cisco Edge 340 Series](#).

Powering On the Cisco Edge 340 Series

Connect the power cord to an electrical outlet. Press the **Power** button to power on the Cisco Edge 340 Series. See [Table 2](#) for a description of the LED colors and their meanings.

Resetting to Factory Mode

To reboot the Cisco Edge 340 to factory mode and force an image upgrade, press and hold the **Factory mode pinhole** for more than 5 seconds when you press the **Power** button to power on.

Technical Specifications

Table 3 Cisco Edge 340 Series Environmental and Physical Specifications

Environmental Ranges		
Operating temperature	Without power supply and powered by PoE	0 to 50°C
	With power supply	0 to 45°C
Storage temperature	-13 to 158°F (-25 to 70°C)	
Relative humidity	Operating and storage: 10 to 90% (noncondensing)	
Operating altitude	Without power supply and powered by PoE	0 to 3000 m
	With power supply	0 to 2000 m
Storage altitude	Up to 4573 m	
Physical Specifications		
Weight (without bracket)	0.912 kg (2.01 lb)	
Dimensions (H x W x D)	244 mm x 186 mm x 35 mm (9.6 in. x 7.3 in. x 1.4 in.) (without mount)	

Regulatory Standards Compliance

This section includes all the regulatory, safety, and EMC standards.

Table 4 *Regulatory Standards Compliance for the Cisco Edge 340 Series*

Specification	Description
Safety	UL 60950-1 Second Edition CAN/CSA-C22.2 No. 60950-1 Second Edition EN 60950-1 Second Edition IEC 60950-1:2005 (Second Edition), Am 1:2009 AS/NZS 60950-1 GB4943.1- 2011 CCC (China compulsory certification)
EMC	FCC Part 15 (CFR 47) ICES-003 AS/NZS CISPR22 EN55022:2010 CISPR22:2008 EN61000-3-2:2006/A2:2009 EN61000-3-3:2008 VCCI KN22 CNS13438 KN24 EN55024:2010 CISPR24:2010
Bluetooth	BQB
WIFI	802.11a/b/g/n Mark
Wireless	SRRC
Radio	FCC Part 15.247 (CFR 47) FCC Part 15.407 RSS-210 EN 300328 V1.7.1 EN 301-489-1 EN 301-489-17 EN 301-893 DGT LP0002 NOM-121 AS/NZS 4268 IDA HKTA 1039 ARIB STD - T66 ARIB STD - T71 Anatel EN 50385 Canada RSS-102 Issue 4 OET 65C/2.1091/ all applicable KDB's including multiple transmitter requirements

EMC Class B Notices, Warnings, and Safety Information

This section includes the EMC Class B warnings for the Cisco Edge 340 Series.

Statement 2018—Class B Notice for FCC

Modifying the equipment without Cisco's authorization may result in the equipment no longer complying with FCC requirements for Class B digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference to radio or television communications at your own expense.

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. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or TV technician for help.



Caution

The Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification to said product not expressly approved by Cisco, including the use of non-Cisco antennas, could void the user's authority to operate this device.



Caution

The band from 5600 to 5650 MHz will be disabled by the software during the manufacturing and cannot be changed by the end user.



Caution

Within the 5.15 to 5.25 GHz band, this device is restricted to indoor operations to reduce any potential for harmful interference to co-channel Mobile Satellite System (MSS) operations. This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Statement 2022—Class B Notice for Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Canadian Compliance for the Cisco Edge 340 Series

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Cet émetteur ne doit pas tre Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur. Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

This radio transmitter MODEL has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio MODEL a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Statement 295—Class B Warning for Korea



Warning

This is a Class B Device and is registered for EMC requirements for residential use. This device can be used not only in residential areas but in all other areas.

주의 B급 기기 이 기기는 가정용으로 전자파 적합 등록을 한 기기로서 주거지역 내에서는 물론 모든 지역에서 사용할 수 있습니다.

Korea Application Statement

This equipment generates radio frequency that may cause harmful interference. This equipment must not be co-located in the environment of human safety exposure.

해당 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음.

Statement 157—VCCI Compliance for Class B Equipment



Warning

This is a Class B product based on the standard of the VCCI Council. If this is used near a radio or television receiver in a domestic environment, it may cause radio Interference. Install and use the equipment according to the instruction manual.

VCCI-B

警告

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

V C C I - B

Compliance Statement for Taiwan

低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

197048

Compliance Statement for Device Working at 2.4 G and 5G in Brazil

This equipment operates on a secondary basis and, consequently, must accept harmful interference, including from stations of the same kind, and may not cause harmful interference to systems operating on a primary basis

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

FCC Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and consider removing the no-collocation statement.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Declaration of Conformity for RF Exposure

This section contains information on compliance with guidelines related to RF exposure.

This Device Meets International Guidelines for Exposure to Radio Waves

The Cisco Edge 340 series device includes a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves (radio frequency electromagnetic fields) recommended by international guidelines. The guidelines were developed by an independent scientific organization (ICNIRP) and include a substantial safety margin designed to ensure the safety of all persons, regardless of age and health.

As such the systems are designed to be operated as to avoid contact with the antennas by the end user. It is recommended to set the system in a location where the antennas can remain at least a minimum distance as specified from the user in accordance to the regulatory guidelines that are designed to reduce the overall exposure of the user or operator.

Separation Distance		
MPE	Distance	Limit
0.107 mW/cm ²	20.00 cm (7.87 inches)	1.00 mW/cm ²

The World Health Organization has stated that present scientific information does not indicate the need for any special precautions for the use of wireless devices. They recommend that if you are interested in further reducing your exposure then you can easily do so by reorienting antennas away from the user or placing the antennas at a greater separation distance then recommended.

This Device Meets FCC Guidelines for Exposure to Radio Waves

The Cisco Edge 340 series device includes a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves (radio frequency electromagnetic fields) as referenced in FCC Part 1.1310. The guidelines are based on IEEE ANSI C 95.1 (92) and include a substantial safety margin designed to ensure the safety of all persons, regardless of age and health.

As such the systems are designed to be operated as to avoid contact with the antennas by the end user. It is recommended to set the system in a location where the antennas can remain at least a minimum distance as specified from the user in accordance to the regulatory guidelines that are designed to reduce the overall exposure of the user or operator.

The device has been tested and found compliant with the applicable regulations as part of the radio certification process.

Separation Distance		
MPE	Distance	Limit
0.107 mW/cm ²	20.00 cm (7.87 inches)	1.00 mW/cm ²

The US Food and Drug Administration has stated that present scientific information does not indicate the need for any special precautions for the use of wireless devices. The FCC recommends that if you are interested in further reducing your exposure then you can easily do so by reorienting antennas away from the user or placing the antennas at a greater separation distance than recommended or lowering the transmitter power output.

This Device Meets the Industry Canada Guidelines for Exposure to Radio Waves

The Cisco Edge 340 series device includes a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves (radio frequency electromagnetic fields) as referenced in Health Canada Safety Code 6. The guidelines include a substantial safety margin designed into the limit to ensure the safety of all persons, regardless of age and health.

The systems are designed to be operated as to avoid contact with the antennas by the end user. It is recommended to set the system in a location where the antennas can remain at least a minimum distance as specified from the user in accordance to the regulatory guidelines that are designed to reduce the overall exposure of the user or operator.

Separation Distance		
MPE	Distance	Limit
0.107 mW/cm ²	20.00 cm (7.87 inches)	1.00 mW/cm ²

Health Canada states that present scientific information does not indicate the need for any special precautions for the use of wireless devices. They recommend that if you are interested in further reducing your exposure you can easily do so by reorienting antennas away from the user, placing the antennas at a greater separation distance than recommended, or lowering the transmitter power output.

For More Information

These documents provide complete information about the Cisco Edge 340 and are available at:

www.cisco.com/go/cisco_edge_340

- *Cisco Edge 340 Series Software Configuration Guide*
- *Release Notes for the Cisco Edge 340 Series*



Note

Before installing, configuring, or upgrading the Cisco Edge 340 Series, refer to the Release Notes for the latest information.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>.

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