TippingPoint
Hardware Safety and Compliance Guide

August 2023

Edition: August 2023, Rev A7
Publication Part Number: 5200-0537

Legal and notice information

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TippingPoint Hardware Safety and Compliance Guide

This guide describes Trend Micro™ TippingPoint™ product regulatory compliance, and provides safety requirements and warnings.

Overview

Before you install your TippingPoint product, review all of the preparation instructions and safety requirements.

Regulatory Compliance and Safety Requirements

This information describes the product regulatory compliance and includes safety information. To ensure safe operation of the product, follow all of the safety information.

European Union Regulatory Notice

Products bearing the CE marking comply with the following EU Directives:

- Low Voltage Directive 2014/35/EU
- EMC Directive 2014/30/EU
- Ecodesign Directive 2009/125/EC, where applicable
- The RoHS Directive 2011/65/EU

CE compliance of this product is valid if powered with the correct CE-marked AC adapter provided.

Compliance with these directives implies conformity to applicable harmonized European standards (European Norms) that are listed in the EU Declaration of Conformity issued for this product or product family, and are available (in English only) either within the product documentation or from the Trend Micro site at *http://www.trendmicro.com*.

One of the following conformity markings is placed on the product to indicate the compliance:

Table 1. EU Conformity Markings

Marking	Description
	For non-telecommunications products and for EU harmonized telecommunications products, such as Bluetooth® within power class below 10mW.
	For EU non-harmonized telecommunications products (If applicable, a 4-digit notified body number is inserted between CE and !).

Please refer to the regulatory label provided on the product.

The point of contact for European regulatory matters is:

European Regulatory Address: Trend Micro, Model Farm Road, Cork, Ireland, Eircode T12 VP44.

EMC Class A Notices and Warnings

The following EMC Class A Notices and Warnings apply to all TippingPoint Class A devices.

Class A Notice for Canada

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Class A Notice for the Federal Communications Commission

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at personal expense.

Note: The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by TippingPoint may void the user's authority to operate the equipment. Refer to the manual for specifications on cabling types.

VCCI Class A Warning for Japan

This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI－A

Class A Notice For BSMI

警告使用者:

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

Class A Notice For Korea

A급 기기 (업무용 방송통신기기)	이 기기는 업무용(A급)으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정 외의 지역에서 사용하는 것을 목적으로 합니다.

Class A Notice For China

声明

此为 A 级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取可行的措施。

本设备不适合在儿童可能会出现的场所使用

Class A Warning for CISPR 32

This is a class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

EMC Environmental Conditions for Products Installed in the European Union

- The installation must be done in a location under the control of the user of the product.
- Grounding and bonding shall meet the requirements of ETS 300 253 or CCITT K27.
- Where applicable AC power distribution shall be one of the following types: TN-S and TN-C as defined in IEC 364-3.
- Where applicable DC power source shall be SELV and the product must be grounded to the ground terminal connector labeled with the IEC 60417-5019 symbol.

Class B Notices and Warnings

The following notices apply to TippingPoint Class B devices.

Class B Notice for Canada

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Class B Notice for the Federal Communications Commission

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 the 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 television technician for help.

Note: The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by TippingPoint may void the user's authority to operate the equipment. Refer to the manual for specifications on cabling types.

Declaration of Conformity for Products Marked with the FCC Logo (United States only)

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.

For questions regarding the product, contact:

Trend Micro
225 E. John Carpenter Freeway
Suite 1500
Irving, TX 75062
USA
(888) 762-8736

For questions regarding this FCC declaration, contact:

Trend Micro
225 E. John Carpenter Freeway
Suite 1500
Irving, TX 75062
USA
(888) 762-8736

To identify this product, refer to the part, series, or model number found on the product.

Class B Notice for Japan

This is a Class B product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment 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.

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。　　ＶＣＣＩ－Ｂ

Class B Notice for Korea

B급 기기 (가정용 방송통신기기)	이 기기는 가정용(B급)으로 전자파적합등록을 한 기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

Directive Compliance

The following directives and certifications apply to the product.

European Directives

Safety Certifications

- UL 507
- UL 1007
- UL 60950-1 and 62638-1
- CAN/CSA 22.2 No.60950-1 and 62638-1
- CB to EN/IEC 60950-1 and 62638-1 with country deviations
- AS/NZS 60950-1 and 62638-1
- CSA C22.2 No. 113

Electromagnetic Compatibility Certifications

- FCC Part 15 Class A
- EN55032 Class A (CISPR32)
- EN55035 (CISPR35)
- EN 61000-3-2
- EN 61000-3-3
- VCCI Class A
- AS/NZS CISPR32 Class A
- KC Class A
- CNS 13428 Class A
- ICES-003 Class A
- TCNV 7189 Class A

Electromagnetic Compatibility Certifications for Class B Devices

- FCC Part 15 Class B
- EN55032 Class B (CISPR32)
- EN55035 (CISPR35)
- EN 61000-3-2
- EN 61000-3-3
- VCCI Class B
- AS/NZS CISPR32 Class B
- KC Class B
- CNS 13438 Class B
- ICES-003 Class B
- TCNV 7189 Class B

Reduction of Hazardous Substances

TippingPoint products comply with the RoHS Directive 2011/65/EU.

Trend Micro
Model Farm Road
Cork, Ireland
Eircode T12 VP44

Waste Electrical and Electronic Equipment

This product complies with the labeling requirement of the Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC.

Taiwan Battery Recycle Statement

Turkish Recycling Notice

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur

Ukraine Compliance Statement

Україна: Обладнання відповідає вимогам Технічного регламенту щодо обмеження використання деяких небезпечних речовин в електричному та електронному обладнані, затвердженого постановою Кабінету Міністрів України від 3 грудня 2008 № 1057.

Ukraine: The equipment complies with requirements of the Technical Regulation, approved by the Resolution of Cabinet of Ministry of Ukraine as of December 3, 2008 No. 1057, in terms of restrictions for the use of certain dangerous substances in electrical and electronic equipment.

Ukrainian National Conformity Logo

Safety Guidelines and Warnings

Before you install your product, read this entire section for important safety guidelines and warnings. The translated warnings from this section are available with your product documentation on the Trend Micro Online Help Center at *http://docs.trendmicro.com/en-us*.

If not properly installed and maintained, electrical circuitry equipment can pose dangers to both personnel and equipment. To prevent accidents, adhere to the following guidelines to ensure general safety:

- Remove any dust from the area. Keep the area around the product clear and dust-free, both during and after installation.
- Wear safety glasses if you are working under conditions that might be hazardous to your eyes.
- Your product may have serviceable modules and hot-swappable power supplies. It has no other serviceable parts inside.

Cautions

Cautions inform you about how to avoid a serious loss that stops short of physical damage, such as the loss of data, time, or security. Cautions tell you what you should or should not do to avoid such losses, and the consequences of not heeding the caution.

Caution: Do not power up the equipment while you install and connect the system.
If you connect the power improperly and then apply power, the cards and chassis could be damaged.
You are responsible for installing an AC power disconnect for the entire rack unit. This main disconnect must be readily accessible, and it must be labeled as controlling power to the entire unit, not just to the server.

Caution: The equipment rack must be anchored to an unmovable support to prevent it from falling over when one or more servers are extended in front of it on slide assemblies.
The equipment rack must be installed according to the manufacturer's instructions. You must also consider the weight of any other device installed in the rack.
Make sure that the chassis cooling fans run continuously while the system is powered.

Caution: Make sure all cards are completely connected to the backplane. Improper connections can disrupt system operation.

Caution: When using a DC power supply, be sure to replace the plastic cover on the on the terminal block input after connecting the power. Failure to do so exposes you to a risk of severe injury from electric shock.

Warnings

Warnings inform you about how to avoid physical injury to people or equipment. For people, injury includes anything from temporary conditions, such as pain, to irreversible conditions such as death. For equipment, injury means anything requiring repair. Warnings tell you what you should or should not do, and the consequences of not heeding the warning.

Installation Warnings

Warning: Only trained and qualified personnel should install, replace, or service this equipment. Disconnect the power and network cables before servicing.

Warning: Read all of the installation instructions before you connect the system to its power source.

Warning: When installing the product, always make the ground connection before applying power to the unit. This equipment needs to be grounded to an external ground connection. Use a green and yellow 12 AWG ground wire to connect the host to earth ground during normal use. Disconnect the ground connection only when the unit is completely powered down.

Warning: On the product during this procedure, wear grounding wrist straps to avoid ESD damage to cards and modules. Do not directly touch the backplane with your hand or any metal tool, or you could shock yourself.

Warning: To prevent personal injury or damage to the chassis, lift the chassis from underneath its lower edge.

Warning: This equipment is to be installed and maintained by service personnel only as defined by AS/NZS 60950-1 and 62638-1 Service Personnel.

Warning: The Installation of this product must comply with local and national electrical codes. The electrical rating is labeled on the product.

Warning: This unit is intended for installation in restricted access areas only.

Warning: This product requires short-circuit (overcurrent) protection, to be provided as part of the building installation. Install only in accordance with national and local wiring regulations.

Warning: Do not work on the system or connect or disconnect cables during periods of lightning activity.

Warning: To prevent the unit from overheating, do not operate it in an area that exceeds the maximum recommended ambient temperature of 104° F (40° C). To prevent airflow restriction, allow at least 3 inches (7.6 cm) of clearance around the ventilation openings.

Warning: Enclosed racks may have higher ambient temperatures than open racks. Ensure closed rack ambient temperatures do not exceed maximum recommend ambient temperature of 104° F (40° C).

Warning: The final disposal of this product must be done according to all national laws and regulations.

Parts Warnings

Warning: Do not operate the system unless all cards and top cover are in place.

Warning: On the product, do not operate the system unless all cards, faceplates, front covers, and rear covers are in place. Blank faceplates and cover panels serve three important functions: they prevent exposure to hazardous voltages and currents inside the chassis; they contain electromagnetic interference (EMI) that could disrupt other equipment; and they direct the flow of cooling air through the chassis. To prevent electric shock, do not open the enclosure of the product.

Warning: To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.

Warning: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

Warning: When connecting equipment to IT power distributions, Phase to phase voltage must not exceed 240 V. Always use the power adapter and power cord shipped with the product to the correct voltage.

Warning: The ports on the front of the product are Safety Extra-Low Voltage (SELV) circuits. SELV circuits should only be connected to other SELV circuits.

Warning: This product might have more than one power supply source. All power sources must be removed to de-energize the unit.

Warning: Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.

Warning: Do not expose the product to strong magnets or magnetic fields.

Warning: Keep all liquids and dust away from the product.

Warning: All optical interfaces and sources connected to this product and its modules must only use Class 1 lasers. Using any other Laser Class source can create hazardous conditions to the user.

Warning: This product can contain Class 1 lasers. Do not stare into the laser beam or view it directly with optical instruments. Install covers for the laser connectors when they are not in use.

Warning: Use caution when touching exposed metallic surfaces, which can become hot during normal operation.

Warning: The cards and modules can get hot during operation. When removing a card or module, hold it by the faceplate and bottom edge. Allow the card or module to cool before touching any other part of it or before placing it in an antistatic bag.

Warning: The product uses double pole/neutral fusing. Use caution when servicing this product.

Warning: The user must install only Optical Transceiver Modules that comply with the appropriate standard and/or regulation - UL 60950-1 and 62638-1, FDA/CDRH 21 CFR 1040 Class 1, or (IEC/CENELEC) EN 60825 Class 1.

Rack and Clearance Requirements

TippingPoint recommends that you mount the product in a standard 19-inch or 23-inch rack. The vertical hole spacing on the rack rails must meet standard EIA-310-C requirements that specify one-inch (2.54 cm) spacing. Ensure that you have a minimum of three inches clearance at the side of the ventilation slots.

Note: Some devices have different rack and clearance requirements, or may have other mounting and installation options. See your product hardware documentation for more information.

Ventilation and Location

Ventilation and proper location are essential to the proper operation of the product. Follow these guidelines to ensure that the product receives adequate ventilation.

- When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.
- Ensure that the unit is positioned properly on the rack.
- There should be three inches clearance at the ventilation openings.
- When mounting this unit in an enclosed or multi-rack assembly, the operating ambient temperature of the rack may be greater than the room ambient temperature. Ensure that the maximum ambient temperature does not exceed 104° F (40 ° C).

Environmental Requirements

For the product to run properly, your environment must meet the proper criteria. The following table details the recommendations for temperature, humidity, and altitude settings for the Service Provider environment.

Table 2. Environmental Requirements

Environmental Specifications	Description
Temperature	0 to 40 ° C (32 to 104 ° F) — Operating -20 to 80° C (-4 to 176 ° F) — Storage[1]
Humidity	5 to 95% (non-condensing)
Altitude	No degradation up to 10,000 feet above sea level[2]

1. For 9200TXE devices, the storage temperature is -20 to 70° C (-4 to 176 ° F).
2. For 9200TXE devices, there is no degradation up to 2000 meters (6561 feet).

Reliable Earthing

Ensure that an external grounding connection is available for the product and follow these guidelines:

- For AC-powered products, use only the AC power cords that have been provided with the product. The use of other cords could be hazardous to your safety.
- For DC-powered products, ensure that the product is grounded to the ground termination connector labeled with the IEC 60417-5019 symbol:

Always make the ground connection first when you install the product, and ensure that it is in place before you turn on the power or connect any network cables. When you disconnect the product, remove the ground connection last, only after the power has been completely turned off and all cables have been disconnected. When installed in a rack, make sure that the rack is grounded to provide an adequate ground location for the ground wire that is attached to the chassis.

ESD Requirements

Damage from Electromagnetic Static Discharge (ESD) can occur when electronic components are improperly handled. Its results can be complete or intermittent system failures. Proper ESD protection is required whenever you handle equipment. It is not necessary to open the product chassis to add or remove any components. The following general grounding guidelines apply in the event that a power supply module or high availability module must be replaced.

- Always use an ESD wrist strap when adding or removing components from the chassis.
- Avoid touching the circuit boards or connectors on all cards and modules.
- Avoid contact between the printed circuit boards and clothing. The wrist strap only protects components from ESD voltages on the body. ESD voltages on clothing can still cause damage.
- Place a removed component board-side-up on an antistatic surface or in a static-shielding container that is also grounded to the same point as the device. If you plan to return the component to the factory, immediately place it in a static-shielding container.

Hot Swapping Guidelines

A hot swappable card or module can be removed or replaced without disconnecting power to the system.

Some TippingPoint devices allow you to hot swap cards or modules. The device automatically senses when you add or remove a card or module, and then runs diagnostic and discovery routines to acknowledge the presence or absence of the card or module.

If you remove a card or module, and replace it with the same type of card or module, the system resumes operation without any operator intervention.

- Do not force the card or module into its slot. This can damage the pins on the backplane if they are not aligned properly with the card or module.
- Ensure that the card or module is straight and not at an angle when you install it in the slot, which can damage the equipment. Use the guide rails to install the card or module correctly.
- Fully depress the ejector tabs to ensure that the card connector mates with the backplane correctly. Firmly seat the card in the slot by locking the card with the black levers.

To determine if your device contains hot swappable cards or modules, review the documentation for your product.

Unpack the Product

Each chassis is securely packaged in a shipping box.

Caution: ESD can damage the product if you do not take necessary precautions. Installation and maintenance personnel should be properly grounded using ground straps to eliminate the risk of ESD damage to the equipment. All cards and modules are subject to ESD damage whenever they are removed from the chassis. Use caution when opening the product boxes.

To unpack the product

1. Inspect the packing container. If you see any damage or other signs of mishandling, inform both the local freight provider and TippingPoint before unpacking. Your freight provider can provide you with the procedures necessary to file a claim for damages.
2. Carefully open the box.
3. Remove all packing material.
4. Verify the contents in the shipping package. Compare the packing list to your shipment and to your order. If any items are missing, contact your TippingPoint sales or field representative.
5. Remove the chassis from the box.
6. Inspect all the equipment inside for damage. If you think any equipment might be damaged, contact your freight provider for how to lodge a damage claim. Also, contact your TippingPoint sales or field representative for instructions.

Note: The shipping materials are recyclable. Please save for later use or dispose of them appropriately.
