

Extreme Networks SA201 Defender Adapter

Installation Guide



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1 Overview

Package Contents
Power Connections
LEDs
SA201 Side Ports

The Defender Adapter SA201 delivers enterprise-grade performance and personalized protection for vulnerable wired devices. Placed between the network and the device, the Defender Adapter works in conjunction with the Defender Application (a value add application on the ExtremeCloud Appliance) to secure, isolate, track and monitor IoT devices. SA201 has a full layer 1-7 visibility and can be paired 1:1 with a medical or IoT device in a hospital or campus environment. The SA201 solution capabilities include:

- Isolation of groups of IoT devices into their own secure zones. This helps in secure attachment of IoT devices into the specified secure zone.
- Protection of IoT devices from being seen from harmful traffic such as viruses and malware.
- Filtration of traffic flows by limiting what the device receives and transmits.
- Use of Follow Me profiles that are set centrally and applied on a by-device basis. This helps in automatic assignment of profiles when the device is connected or disconnected from the network.



Note

The SA201 requires a minimum base firmware of Defender 3.1. For Cloud, the minimum base firmware is ExtremeCloud Appliance 4.26.02.

Package Contents

Verify the box contents of the SA201 Adapter as listed:

- SA201 Defender Adapter
- Two M4 wood screws; the head may be up to 2.5mm thick. Screw dimension: 3.5x25.4mm
- Two screw-in wall anchors
- SA201 Quick Reference Guide
- ExtremeCloud™ Quick Start Card

Power Connections

Power Sources

The SA201 Adapter uses Power over Ethernet (PoE) as follows:

Table 1: Main Power Source

Power Source	Description
Power over Ethernet	Power is provided through the RJ45 Ethernet port (LAN1 port) on the Network side of the SA201 adapter. When the SA201 adapter is powered by 802.3AT, the DEVICE port is capable of power sourcing (refer Figure).

Table 2: Optional Power Source

Optional Power Source	Description
External 12V DC Power Supply (optional; #30512 - PWR 12VDC, 2A, 2.1mm x 5.5mm connector)	The SA201 can also be powered by an external DC power supply plugged into an AC source. Plug the supply's input jack into the DC-In port.

**Note**

If the SA201 adapter is plugged into the PoE switch port and the 12V DC-In port, the unit will use the DC input power source over the PoE port.

**Note**

The SA201 adapter requires a reboot when the input power source is changed.

LEDs

LEDs on SA201 Adapter

There are LEDs on four of the six sides of the SA201 unit. The figure below shows the LEDs on the front cover of the adapter.

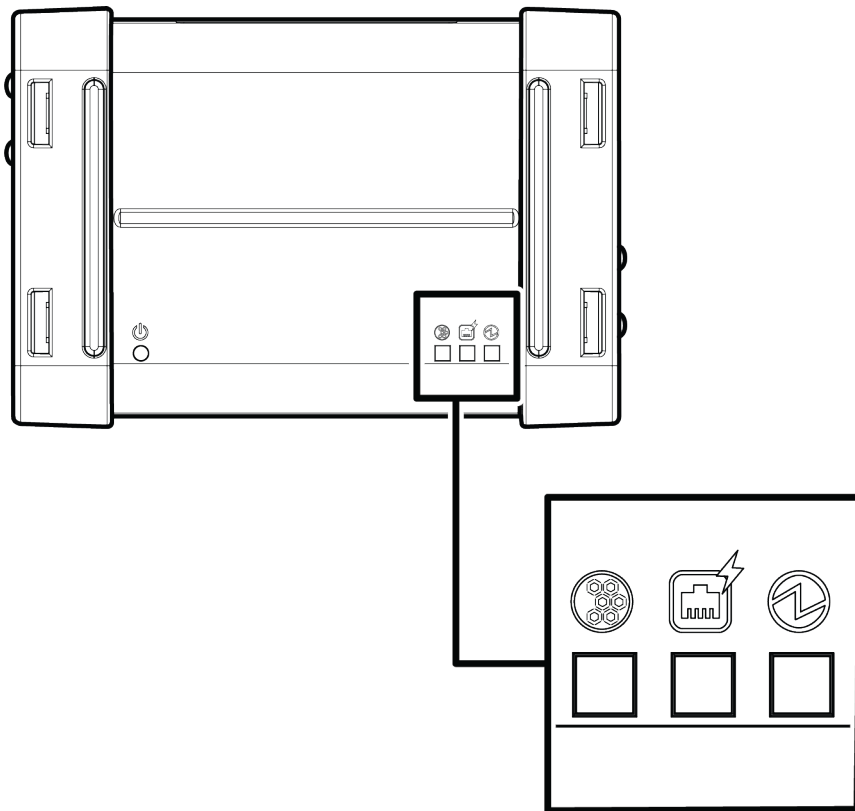


Figure 1: LEDs on front cover of SA201





	Power		Status
	PSE Client Port		IoT (BLE or 802.15.4)

Table 3: SA201 LED Status

LED Icon	LED Color	Description
Power	GREEN	Normal power status
Status	GREEN	Normal operational status
	AMBER	Non-operational status
PSE Client Port	GREEN	Normal operational status (DEVICE port is capable of providing PoE)
	OFF	Non-operational status
IoT (BLE)	BLUE	Indicates BLE is enabled
	OFF	Non-operational status



SA201 Side Ports

The sides ports of SA201 are used to power up and connect the adapter.

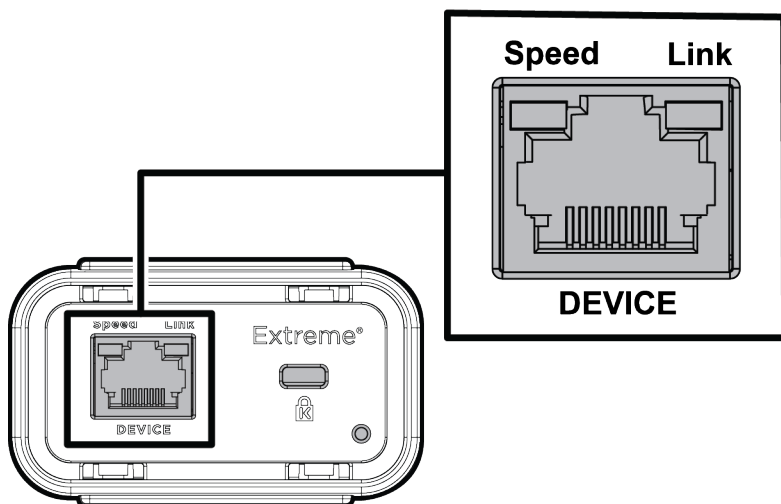


Figure 2: SA201 Ethernet Port

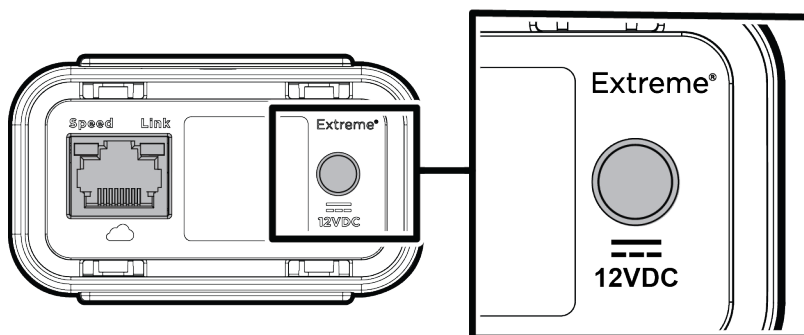


Figure 3: SA201 12V DC Power Supply Port

2 Installation

Mounting the SA201 Adapter

Follow this procedure to install the SA201 adapter:

- 1 Match the model number on the purchase order with the model number in the packing list and on the SA201 adapter.

Table 4: SA201 Product Information

Part Number	Description
39505	Surge Adapter 201 IoT Solution; Ethernet Security Device (QXO-SA201-FCC).

- 2 Verify the box contents.
- 3 Review and follow the [safety guidelines](#).
- 4 Mount the unit to a [table](#), on a [shelf](#), or to a [wall](#).
- 5 [Connect the SA201 adapter to the network](#).

Mounting the SA201 Adapter

Use these instructions as guidelines for mounting the SA201 easily and safely.



Caution

Use ESD (Electrostatic Discharge) protection wrist strap when installing the SA201 adapter.



Important

The SA201 unit may become very warm during normal use. It complies with the user-accessible surface temperature limits defined by the International Standards for Safety (IEC 60950-1 and IEC 62368).

SA201 mounting scenarios include:

- 1 Mounting on a [table](#).
- 2 Mounting to a [shelf](#).
- 3 Mounting to a [wall](#).

Mounting on a table

To mount the SA201 adapter on a table:

- 1 Place the SA201 adapter on a table close to the Device and Network cables.

- 2 Connect the Device and Network LAN cables.

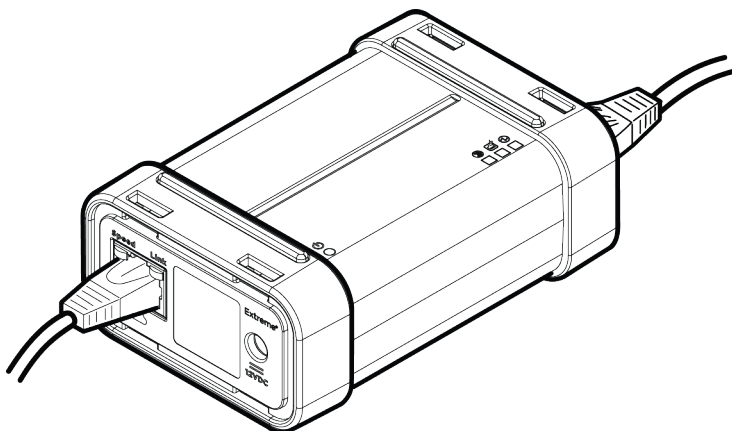


Figure 4: Mounting the SA201 adapter on a table

Mounting to a shelf

To mount the SA201 adapter to a shelf:

- 1 Place the SA201 at a secure position close to the corresponding equipment.
- 2 Secure the unit using wire ties.
- 3 Connect the LAN cables.

Mounting to a wall

You can mount the SA201 adapter using the wall mount keyholes in the back of the unit. The keyholes are bidirectional and let the adapter to be mounted in either direction. To mount the SA201 adapter to a wall:

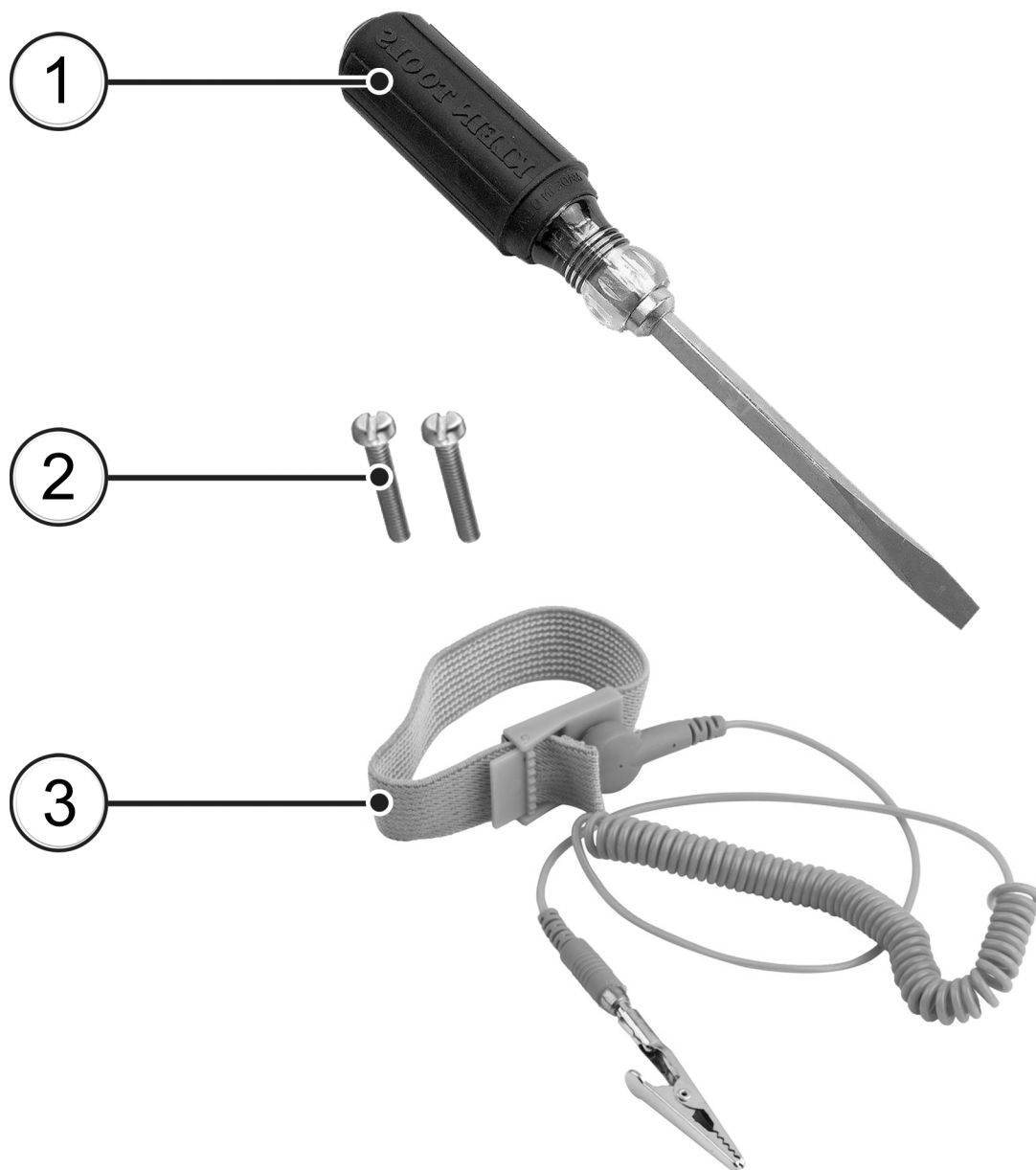


Figure 5: Tools required

Table 5: Tools Required to mount to a wall

Number	Description
1	Flat-head screwdriver
2	M4 screws and wall anchors
3	ESD-protective wrist strap (purchased separately)

1 Mark the two hole centers. The two screw centers should be 3.6" apart.

- 2 For drywall/plasterboard walls, when using plastic anchors, drill two holes using a drill bit of 6mm or 1/4" diameter.
- 3 For wood walls, when using only wood screws, drill two holes using a drill bit of 3mm or 1/8" diameter.
- 4 Screw in the respective screws into the holes.
- 5 Attach the SA201 adapter to the screws.

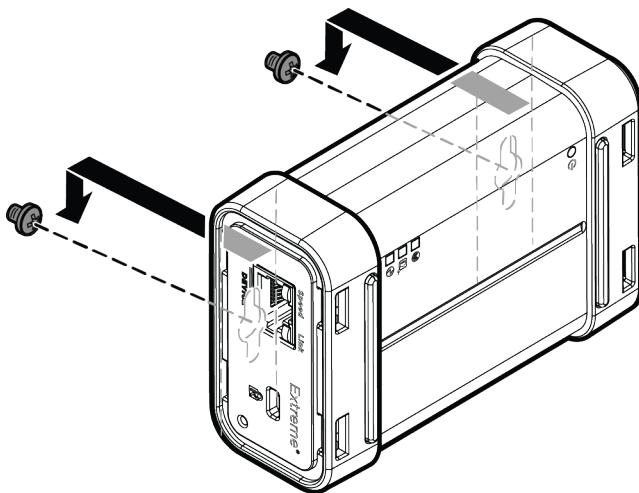


Figure 6: Mounting the SA201 adapter to a wall

- 6 Rock it back and forth to ensure that the unit is secured in place.
- 7 Connect the LAN cables.

3 Connecting the SA201 unit to the network

After installing the SA201 adapter, connect it to the network.



Caution

Connect the equipment only to an outlet with grounding for additional safety against electric shock when using the protective earthing conductor.



Danger

To reduce potential safety issues, only the AC adapter provided with the product, a replacement AC adapter provided by the agency, or an AC adapter purchased separately as an accessory from the agency must be used with the product.

- 1 Connect the LAN 1 cable to the RJ45 Ethernet Port on the left of the 12V DC port.

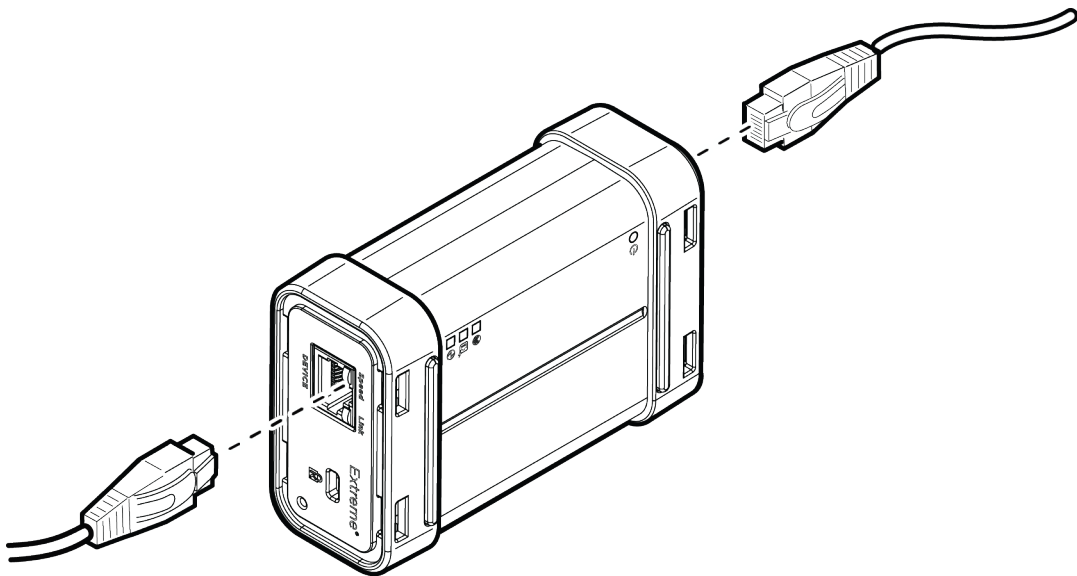


Figure 7: Connecting the SA201 adapter to the network

- 2 Optionally, you can use the 12V DC External power supply. PoE sourcing is not available when the unit is powered using the 12V DC power supply.

4 Specifications

SA201 Adapter Specifications

Item	Specification
Adapter Part Number: 39505	QXO-SA201-FCC
Ethernet Ports	Two RJ45 Gigabit Ethernet ports: One network port with Cloud icon One device port that reads DEVICE
LEDs	Four on both faces of the adapter: The LEDs are located on both faces of the adapter to allow visibility from both sides
Power	PoE and 12V DC Power Supply; compliant with LPS standards
External Power Supply (optional) Part Number: 30512	External 12V DC Power Supply (PWR 12VDC, 2A, 2.1mm x 5.5mm connector)
Operating Temperature	0°C to +35°C (32°F to 95°F)
Non-operating Temperature	-40 °C to +70 °C (-40°F to 158°F)
Enclosure	Plastic material with soft rubber on two edges, for shock resistance and friction
ExtremeCloud™ enabled	Yes

Table 6: SA201 Physical Specifications

SA201 Adapter	Height: 3.5cm (1.4") Width: 6.4cm (2.5") Depth 9.6cm (3.8")
	Weight 0.317kg (0.7lbs)

5 Regulatory Information

FCC Declaration of Conformity Statement
Industry Canada Notice
FCC Radiation Exposure Statement
Safety Guidelines
European Waste Electrical and Electronic Equipment (WEEE) Notice
Hazardous Substances
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NCC Statement

FCC Declaration of Conformity Statement

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 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/TV technician for help.

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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
- This device must accept any interference received, including interference that may cause undesired operation.

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

Industry Canada Notice

This device complies with RSS-247 of the Industry Canada Rules. Operation is subject to the following two conditions:

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

Avis d'Industrie Canada

Ce dispositif est conforme à la norme CNR-247 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes:

- 1 le dispositif ne doit pas produire de brouillage préjudiciable, et
- 2 ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

FCC Radiation Exposure Statement

For Mobile Device Usage



Warning

Radiation Exposure Statement: This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with greater than 20cm between the radiator & your body.



Warning

Déclaration d'exposition aux radiations: Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à plus de 20 cm entre le radiateur et votre corps.

Safety Guidelines

This section contains notices that you must adhere to ensure your personal safety and to prevent any damage to the equipment.



Caution

The unit and all interconnected equipment must be installed indoors within the same building, including all -powered network connections as described by Environment A of the IEEE 802.3af standard.

Qualified Personnel



Danger

Only qualified personnel should perform installation procedures.

European Waste Electrical and Electronic Equipment (WEEE) Notice



In accordance with Directive 2012/19/EU of the European Parliament on waste electrical and electronic equipment (WEEE):

- 1 The symbol above indicates that separate collection of electrical and electronic equipment is required.
- 2 When this product has reached the end of its serviceable life, it cannot be disposed of as unsorted municipal waste. It must be collected and treated separately.
- 3 It has been determined by the European Parliament that there are potential negative effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment.
- 4 It is the users' responsibility to utilize the available collection system to ensure WEEE is properly treated.

For information about the available collection system, please contact Extreme Environmental Compliance at Green@extremenetworks.com.

Hazardous Substances

This product complies with the requirements of Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Declaration of Conformity in Languages of the European Community

Hereby, Extreme Networks, Inc. declares that the radio equipment type Wireless Networking Adapter is in compliance with Directive 1999/5/EC. The full text of the EU declaration of conformity is available at the following Internet address: www.extremenetworks.com

單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛Lead (Pb)	汞Mercury (Hg)	鎘Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr ⁺⁶)	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
金屬零件 (Metal Parts)	○	○	○	○	○	○
電路模組 (Circuit Modules)	—	○	○	○	○	○
電纜及電纜組件 (Cables & Cable Assemblies)	○	○	○	○	○	○
塑料和聚合物零件 (Plastic and Polymeric parts)	○	○	○	○	○	○
<p>備考1. “超出0.1 wt %”及“超出0.01 wt %”係指限用物質之百分比含量超出百分比含量基準值。 Note 1 : “Exceeding 0.1 wt %” and “exceeding 0.01 wt %” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.</p> <p>備考2. “○”係指該項限用物質之百分比含量未超出百分比含量基準值。 Note 2 : “○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.</p> <p>備考3. “—”係指該項限用物質為排除項目。 Note 3 : The “—” indicates that the restricted substance corresponds to the exemption.</p>						

NCC Statement

NCC Statement

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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。

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