Installing the Extreme Networks SA201 Defender Adapter

Overview of the SA201

The SA201 is an Open Networking Adapter IoT (Internet of Things) solution that is used to securely deploy IoT devices. SA201 adapter can be used to provide proxy service for the Defender Adapter Application. 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.

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

The SA201 adapter has the following specifications:

- Primarily designed to support and securely manage IoT devices by reporting any abnormal flow to the Application and preventing the IoT devices from launching malware attacks.
- Two RJ45 Gigabit Ethernet ports:
  - One network port with Cloud icon
  - One device port that reads DEVICE
- LEDs: 4 on both faces (Figure 2)
  - 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.
- Temperature
  - 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.
- Enabled for ExtremeCloud™ support.

For detailed installation information about the SA201, see the *Extreme Networks SA201 Installation Guide*.

Power Connections

The SA201 uses Power over Ethernet (PoE) as follows:
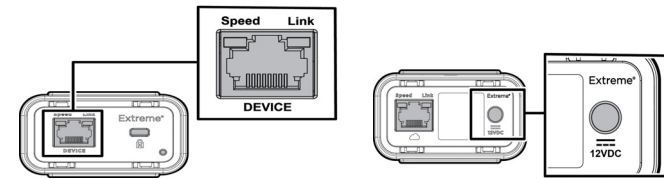
Table 1   Power Sources

Power Source	Description
Power over Ethernet (PoE)	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 1).

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.

Figure 1   SA201 Ethernet port and 12V DC Power Supply

LEDs

There are LEDs on four of the six sides of the SA201 unit. Figure 2 shows the LEDs located on the front cover of the adapter.
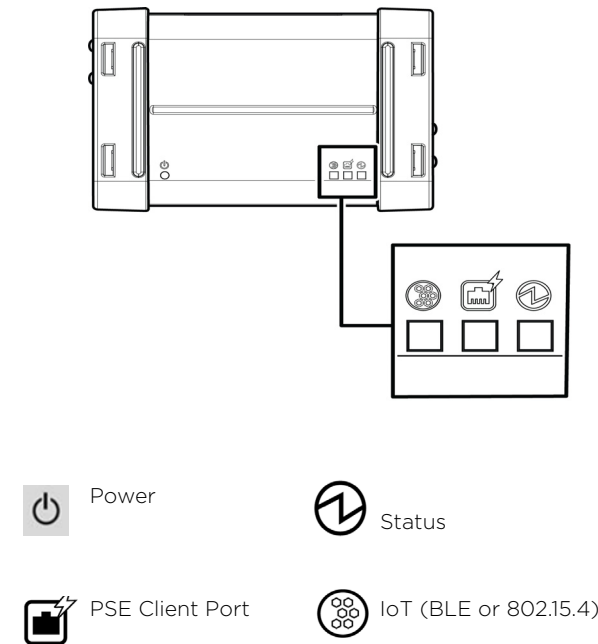
Figure 2   LEDs on Front Cover

⏻ Power	⏻ Status
PSE Client Port	IoT (BLE or 802.15.4)

Table 2   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

For detailed information about Network Speed and Link Activity, see the *Extreme Networks SA201 Installation Guide*.

Verifying the SA201 Box Contents

Verify the contents of the box as listed in the following table:

Table 3   Contents of the SA201 Box

Quantity	Item
1	SA201 Quick Reference
1	SA201 Adapter
2	M4 wood screws; the head may be up to 2.5 mm thick. Screw dimension: 3.5x25.4mm.

Table 3   Contents of the SA201 Box

Quantity	Item
2	Screw-in wall anchors

Note: Before mounting the SA201, read the "Safety Guidelines" on page 2.

Mounting and Connecting the SA201

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

Electrical Hazard: Use ESD (Electrostatic Discharge) protection wrist strap when installing the SA201 adapter.
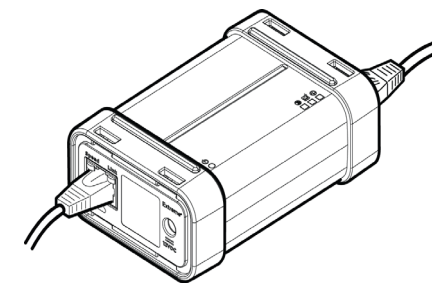
Electrical Hazard: The SA201 unit may become very warm during normal use. It complies with the user-accessible surface temperature limits defined by the International Standards for Safety (IEC 60950-1 and IEC 62368).

Mounting the SA201 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.
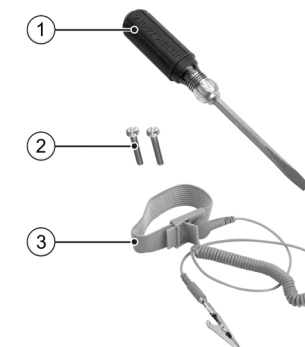
Figure 3   Mounting the SA201 on a Table

Mounting 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 the SA201 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.
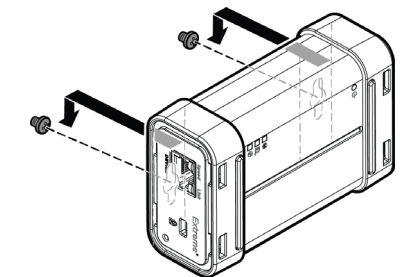
Figure 4   Tools required

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

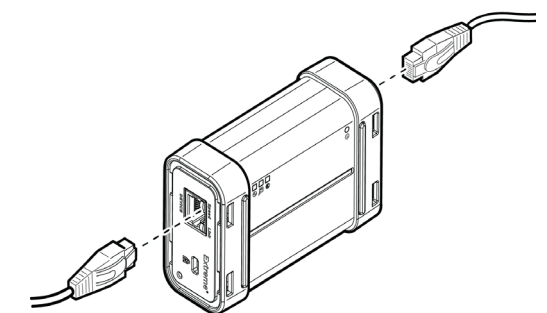## Figure 5   Mounting the SA201 to a Wall

Connecting the SA201 unit 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.

Electrical Hazard: 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.

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

Figure 6   Connecting the SA201 to the Network

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.

For more information, see the *Extreme Networks SA201 Installation Guide*.

Regulatory and Compliance Information

Federal Communications Commission (FCC) Notice:

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.

Warning: 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: (1) This device may not cause harmful interference, and (2) 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.

Warning: FCC Radiation Exposure Statement: The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with another 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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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.

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 PoE-powered network connections as described by Environment A of the IEEE 802.3af standard.

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 LAN Access Point is in compliance with Directive 1999/5/EC. The full text of the EU declaration of conformity is available at the following Internet address: http://www.extremenetworks.com/

Note: Changes or modifications made to this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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)	○	○	○	○	○	○

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.

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.

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.

NCC Statement

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通信。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。

Brazil ANATEL Certification

Warning: Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

Extreme Networks Defender Adapter

Quick Reference

P/N 39505   QXO-SA201-FCC

P/N 9035972-04

Extreme™
Customer-Driven Networking