



DEFENDER SERIES+

Quick Start Guide



Switched IP Controllable Surge Protected PDU

SX-DSP-129 | SX-DSP-169 | SX-DSP-109i | SX-DSP-169i

1. Installation and Components



SX-DSP-129



SX-DSP-169



SX-DSP-109i



SX-DSP-169i

Defender Series+ is designed to be installed on the back of an equipment rack. The supplied nuts, bolts, and washers must be used to mount the Defender Series+ to the rack through the mounting holes **(A)** following the appropriate local regulations and requirements.

1.1 AC Power: Output

Plug the equipment cord **(B)** into the suitable outlet as needed. In Manual, review Introduction, Physical Interfaces, and column Outputs for the suitable plugs for each model's outlets.

1.2 AC Power: Input

Connect power to the Defender Series+ using an appropriately rated 3-wire grounding type power cord provided with the equipment in inlet **(V)**. Do not plug the unit into a relocatable power tap. Check the outlet for correct polarity and presence of a ground conductor before plugging the unit in.

1.3 Ethernet

The RJ-45 connector for Ethernet **(D)** is situated on the front panel and is only to be used for setup and debugging. The default IP Address is DHCP assigned. To find IP address of the device, please use the discovery tool at ametekesp.com. The mDNS protocol is supported for dynamic device discovery.

The default login credentials are:

Username: **admin**

Password: **Adm1nXXXXXX**

Where XXXXXX are the last six characters of the MAC address.

1.4 USB-Micro AB

The USB-Micro AB connector **(E)** is for diagnostics and troubleshooting IP connectivity issues. To use, please use the discovery tool at ametekesp.com or manually enter the static IP address <https://169.254.10.100> into a supported browser. The web server will always be accessible at <https://169.254.10.100> through this USB port. The web server on this interface cannot be changed and will always be unsecured HTTP at port 80.

1.5 LED Indicators:

The outlets have individual power indicator LEDs (**F**). These are paralleled in the control interface. In addition, the unit has an LED indicating power (**G**). Self -Test is indicated by (**C**).

1.6 Buttons

1.6.1 Resettable fuse

The resettable fuse (**H**) is used to reset the Defender Series+ in case the fuse trips. This is a single push button located at the bottom left of the Ethernet RJ-45 jack. Also, there is a reset switch for hardware and another for software.

1.6.2 Hardware Reset

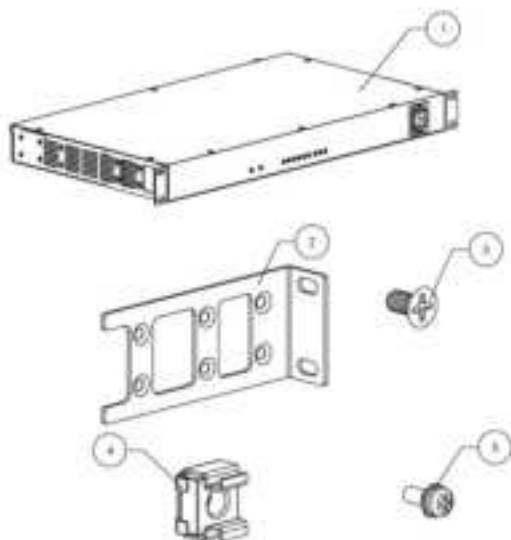
Hardware Reset (**I**): The Hardware Reset button performs a hard reboot of the processor. This hard reboot will immediately switch controlled outlets off, removing power to connected equipment on all outputs.

1.6.3 Software Reset

Software Reset (**J**): The Software Reset button is a multi-functional control depending on length of press. If the button is held for longer than 10 seconds, the unit resets itself to factory defaults, and all custom configurations are erased. If the button is held for less than 10 seconds, the unit will perform a software reset that will not reset any data, or power cycle the connected equipment.

2. Rack Installation

Defender Series+ is designed to be installed in the equipment rack. The supplied nuts, bolts, and washers must be used to mount the Defender Series+ to the rack through the mounting holes (A), (B), (C), or (D) following the appropriate local regulations and requirements.



Inventory

Sl. No	Items	Qty
1	Defender Series Plus Unit	1
2	Ear Mount Bracket	2
3	Flat head Screws	8
4	PAN Head Screws	4
5	Cage nut	4

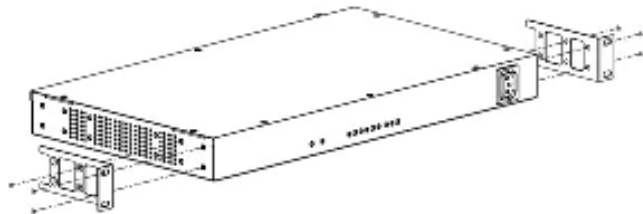
Safety

⚠ ⚠ DANGER

- HAZARD OF ELECTRICAL SHOCK, EXPLOSION, OR ARC FLASH**
- This Unit is intended to use indoor only.
 - Do not install this Unit where excessive moisture or heat is present.
 - Never install any wiring, equipment, or Units during a lightning storm.
 - Plug this Unit into a three-wire, grounded power outlet only. The power outlet must be connected to appropriate branch circuit/main protection (fuse or circuit breaker). Connection to other type of power outlet may result in a shock hazard.
 - Install the unit in such a way that the Wall socket-outlet should be readily accessible.
 - Use only the supplied brackets for mounting and use only the supplied hardware to attach the mounting brackets.
 - Do not use extension cords or adapters with this Unit.
 - If a socket-outlet is not accessible to the equipment, a socket-outlet shall be installed.
 - Do not work alone under hazardous conditions.
 - Check that the power cord, plug, and socket are in good condition.
 - Disconnect the Unit from the power outlet before you install or connect equipment to reduce the risk of electric shock when you cannot verify grounding. Reconnect the Surge Unit to the power outlet only after you make all connections.
 - Unit installation instructions that require verification of the Protective earthing connection of the socket-outlet by a Skilled person.
 - This equipment is not suitable for use in locations where children are likely to be present.
 - Use a protective earth connector with equipment. This type of connector carries the leakage current from the load devices (computer equipment).
 - Do not exceed a total leakage current of 3.5 mA.
 - Do not handle any kind of metallic connector before the power has been removed.
 - Use one hand, whenever possible, to connect or disconnect signal cables to avoid a possible shock from touching two surfaces with different grounds.
 - This unit does not have any user-serviceable parts. Repairs are to be performed only by factory-trained service personnel.
 - The Unit is intended to be installed and operated by a skilled person in a controlled location with restricted access.
 - The ambient operating temperature of a closed or multi-unit rack environment may be greater than the ambient temperature of the room. Ensure the ambient operating temperature of your rack environment does not exceed the rated ambient operating temperature for the device.
 - Ensure the Unit is mounted securely and evenly.
 - To avoid possible electrical shock and equipment damage, Use only the supplied hardware.
- Failure to follow these instructions will result in death or serious injury**

Rack Mounting Options

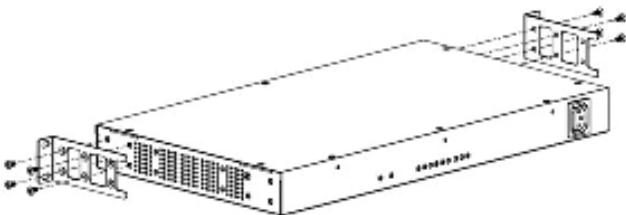
2



Option- Mounting Ear Mount Bracket at Front

Secure Ear Mount Brackets to the Unit using eight Flat head screws

3



Option- Mounting Ear Mount Bracket at Rear

Secure Ear Mount Brackets to the Unit using eight Flat head screws

4



Option- Mounting Ear Mount Bracket at the Center

Secure Ear Mount Brackets to the Unit using eight Flat head screws

5

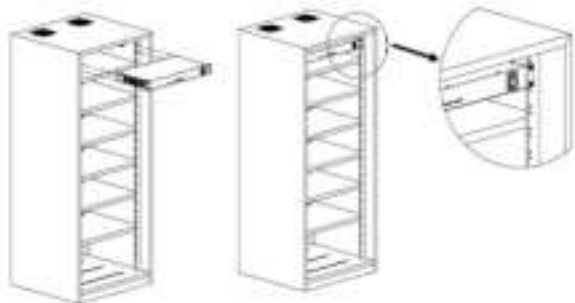


Option- Mounting Ear Mount Bracket at the Center

Secure Ear Mount Brackets to the Unit using eight Flat head screws

Unit Installation into the Rack

1



2

Horizontal Mounting

Mount Unit on 19" rack holes provided in the channel and secure the Unit using four Pan head screws.

3. Access to the Graphic User Interface via Computer

There are two ways to gain access to the internal Web Server where further setup and configuration is available.

3.1 RJ-45 Ethernet Port:

- i. Connect the Defender Series+ to a standard Ethernet network.
- ii. Plug the device into an AC power source. By default, the device is set to *DHCP* and will pull an IP address once it is connected to an AC power source, assuming that your network is set to DHCP. If your network is set for *Static* IP addresses, you may want to initially access the unit via the USB-OTG Port, then go into the Network setting to change over to Static IP addressing.
- iii. To find the IP address of the device, you can download the free SurgeX IP address discovery tool at www.surgex.com. Alternatively, you can use a third-party IP address discovery tool, or look at the IP table built into the network's router.
- iv. Using any web browser, type in the unit's IP address to access the login page. The default login credentials are:

Username: **admin**

Password: **Adm1nXXXXXX**

Where XXXXXX are the last 6 characters of the unit's MAC address. Change your password after logging in for the first time to minimize security issues.

3.2 USB-OTG Port:

- i. Connect the Defender Series+ to your computer using a USB-A to Micro-USB cable.
- ii. Plug the device into an AC power source.
- iii. Using any web browser, type in the default IP address <https://169.254.10.100> to access the login page. The default login credentials are:

Username: **admin**

Password: **Adm1nXXXXXX**

Where XXXXXX are the last 6 characters of the unit's MAC address. Change your password after logging in for the first time to minimize security issues.

