

EMX®

Quick Setup Guide

Thank you for purchasing the EMX rack management system and asset management sensors (asset sensors). This product provides a rack management solution that integrates both asset management and environment monitoring capabilities in the data center and server room.

This Quick Setup Guide explains how to install and configure the EMX. For additional information on any aspect of EMX, see EMX help, which can be accessed from the [Product Support](#) section of Raritan's website. Or you can access the product's online help in the [Product Online Help section](#).

For more detailed information, see the latest release notes provided by Raritan.

Package Contents

The following describes the equipment shipped with an EMX device. If anything is missing or damaged, contact the local dealer or Raritan Technical Support for help.

- The EMX device
- Power cord
- Bracket pack and screws
- Asset sensors (optional)
- Asset tags (optional)

Before You Begin

Prepare the installation site. Make sure the installation area is clean and not exposed to extreme temperatures or humidity. Allow sufficient space around the EMX for cabling and asset sensor connections.

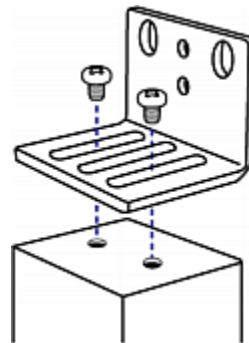
Mounting a Zero U EMX

This section describes how to mount a Zero U EMX device using L-brackets and two buttons.



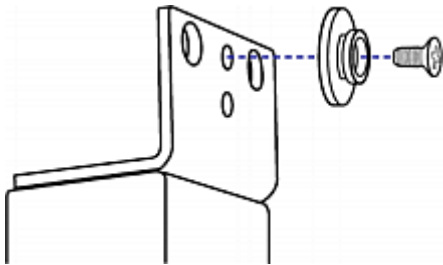
► To mount Zero U models using L-brackets and two buttons:

1. Align the two edge slots of the L-bracket with the two screw holes on the top of the EMX device.
2. Screw the L-bracket to the device and ensure the bracket is fastened securely.



3. Repeat Steps 1 to 2 to screw another L-bracket to the bottom of the device.
4. After both L-brackets are installed on the device, you can choose either of the following ways to mount the device in the rack.
 - Using rack screws, fasten the device to the rack through two identical holes near the edge of each L-bracket.

- Mount the device by screwing a mounting button in the back center of each L-bracket and then having both buttons engage the mounting holes in the rack. The recommended torque for the button is 1.96 N·m (20 kgf·cm).

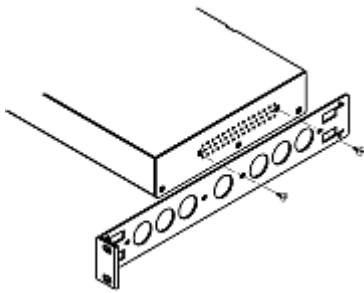


Mounting a 1U EMX

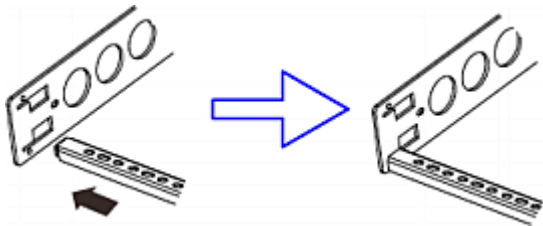
Using the appropriate brackets and tools, fasten the 1U EMX device to the rack or cabinet.

► To mount the 1U EMX device:

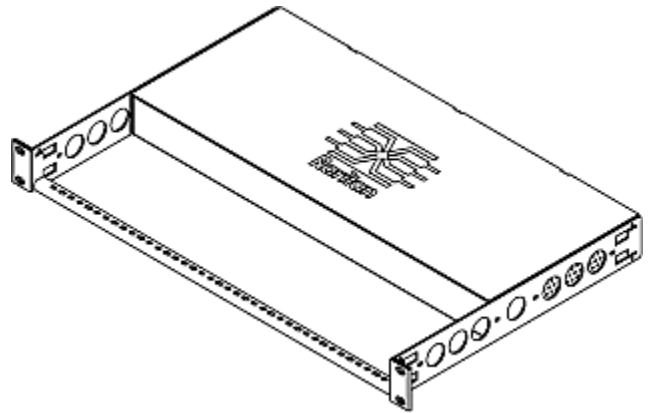
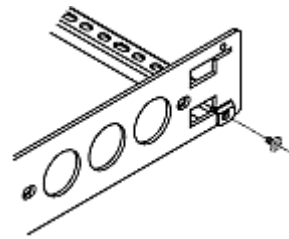
1. Attach a rackmount bracket to both sides of the EMX with the provided screws.



2. Insert the cable-support bar into rackmount brackets.



3. Secure with the provided end cap screws.



4. Fasten the rackmount brackets' ears to the rack using your own fasteners.

Connecting the EMX to a Power Source

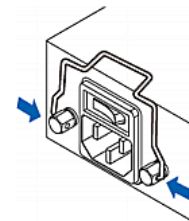
If your EMX device is designed to use a cable retention clip, install the clip before connecting a power cord. A cable retention clip prevents the connected power cord from coming loose or falling off.

The use of cable retention clips is highly recommended for regions with high seismic activities, and environments where shocks and vibrations are expected.

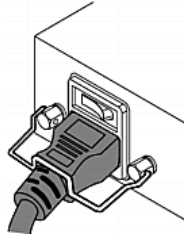


► To connect the EMX device to a power source:

1. Install the cable retention clip by inserting both ends into the tiny holes on two hexagon screws adjacent to the power socket.



2. Plug one end of the Raritan-provided power cord into the power socket, and press the cable retention clip toward the power cord until it holds the cord firmly.



3. Connect the other end of the power cord to an appropriate power source.

Connecting the EMX to a Computer

Connect the EMX to a computer for initial configuration by following either of the procedures below.

► To make a serial RS-232 connection:

- Connect one end of the null-modem cable to the male RS-232 port labeled CONSOLE / MODEM on the EMX, and the other end to the serial port (COM) on a computer.

► To make a USB connection:

1. A USB-to-serial driver is required in Windows®. Install this driver before connecting the USB cable. See **Installing the USB-to-Serial Driver (Optional)** (on page 3).
2. Connect a USB cable between the EMX appliance's USB-B port and the computer's USB-A port.

Installing the USB-to-Serial Driver (Optional)

The EMX can emulate a USB-to-serial converter over a USB connection. A USB-to-serial driver named "Dominion EMX Serial Console" is required for Microsoft® Windows® operating systems.

Download the *USB Driver* file, which contains the *dominion-serial.inf*, *dominion-serial.cat* and *dominion-serial-setup-<n>.exe* files.

Note: <n> in the filename of "dominion-serial-setup-<n>.exe" represents the file's version number.

There are two ways to install this driver: automatic and manual installation. Automatic driver installation is highly recommended.

Note: This is downloaded from the Raritan [Support Files page](#).

► Automatic driver installation in Windows®:

1. Make sure the EMX is NOT connected to the computer via a USB cable.
2. Run *dominion-serial-setup-<n>.exe* on the computer and follow online instructions to install the driver.

Note: If any Windows security warning appears, accept it to continue the installation.

3. Connect the EMX to the computer via a USB cable. The driver is automatically installed.

Note: Manually install the driver only if the automatic installation fails. See the section titled "Installing the USB-to-Serial Driver (Optional)" in the online help for manual installation procedure.

► In Linux:

No additional drivers are required, but you must provide the name of the tty device, which can be found in the output of the "dmesg" after connecting the EMX to the computer. Usually the tty device is "/dev/ttyACM#" or "/dev/ttyUSB#," where # is an integer number.

For example, if you are using the kermit terminal program, and the tty device is "/dev/ttyACM0," perform the following commands:

```
> set line /dev/ttyACM0
> connect
```

Connecting the EMX to Your Network

To use the web interface to administer the EMX, you must connect the EMX to your local area network (LAN). The EMX can be connected to a wired or wireless network.

► To make a wired connection:

1. Connect a standard network patch cable to the ETHERNET port on the EMX.
2. Connect the other end of the cable to your LAN.

► To make a wireless connection:

Do one of the following:

- Plug a supported USB wireless LAN adapter into the USB-A port on your EMX.
- Connect a USB docking station to the USB-A port on the EMX and plug the supported USB wireless LAN adapter into the appropriate USB port on the docking station.

See **USB Wireless LAN Adapters** in online help for a list of supported wireless LAN adapters.

Supported Wireless LAN Configuration

If wireless networking is preferred, ensure that the wireless LAN configuration of your EMX matches the access point. The following is the wireless LAN configuration that the EMX supports.

- Network type: 802.11 A/B/G/N
- Protocol: WPA2 (RSN)
- Key management: WPA-PSK, or WPA-EAP with PEAP and MSCHAPv2 authentication

- Encryption: CCMP (AES)

Important: Raritan only supports specific wireless LAN adapters. Supported 802.11 network protocols vary according to the wireless LAN adapter being used with the EMX. See USB Wireless LAN Adapters.

Configuring the EMX

1. On the computer connected to the EMX, open a communications program such as HyperTerminal or PuTTY.
2. Select the appropriate COM port, and set the following port settings:
 - Bits per second = 115200 (115.2Kbps)
 - Data bits = 8
 - Stop bits = 1
 - Parity = None
 - Flow control = None

Tip: For a USB connection, you can determine the COM port by choosing Control Panel > System > Hardware > Device Manager, and locating the "Serial Console" under the Ports group.
3. In the communications program, press Enter to send a carriage return to the EMX.
4. The EMX prompts you to log in. Both user name and password are case sensitive.
 - a. Username: admin
 - b. Password: raritan (or a new password if you have changed it).
5. If prompted to change the default password, follow onscreen instructions to type your new password.
6. The # prompt appears.
7. Type `config` and press Enter.
8. To configure network settings, type appropriate commands and press Enter. All commands are case sensitive.
 - a. To set the networking mode, type this command:


```
network mode <mode>
```

 where <mode> is *wired* (default) or *wireless*.
 - b. For the wired network mode, you may configure the LAN interface settings. In most scenarios, the default setting (auto) works well and should not be changed unless required.

To set	Use this command
LAN interface speed	<pre>network interface LANInterfaceSpeed <option></pre> <p><option> = <i>auto</i>, <i>10Mbps</i>, or <i>100Mbps</i>.</p>

To set	Use this command
LAN interface duplex mode	<pre>network interface LANInterfaceDuplexMode <mode></pre> <p><mode> = <i>half</i>, <i>full</i> or <i>auto</i>.</p>

Tip: You can combine multiple commands to configure multiple parameters at a time. For example, `network interface LANInterfaceSpeed <option> LANInterfaceDuplexMode <mode>`

- c. For the wireless network mode, you must configure the Service Set Identifier (SSID) parameter.

To set	Use this command
SSID	<pre>network wireless SSID <ssid></pre> <p><ssid> = SSID string</p>

If necessary, configure more wireless parameters shown in the following table.

To set	Use this command
BSSID	<pre>network wireless BSSID <bssid></pre> <p><bssid> = AP MAC address or <i>none</i></p>
Authentication method	<pre>network wireless authMethod <method></pre> <p><method> = <i>psk</i> or <i>eap</i></p>
PSK	<pre>network wireless PSK <psk></pre> <p><psk> = PSK string</p>
EAP outer authentication	<pre>network wireless eapOuterAuthentication <outer_auth></pre> <p><outer_auth> = <i>PEAP</i></p>
EAP inner authentication	<pre>network wireless eapInnerAuthentication <inner_auth></pre> <p><inner_auth> = <i>MSCHAPv2</i></p>
EAP identity	<pre>network wireless eapIdentity <identity></pre> <p><identity> = your user name for EAP authentication</p>
EAP password	<pre>network wireless eapPassword</pre> <p>When prompted to enter the password for EAP authentication, type the password.</p>

To set	Use this command
EAP CA certificate	<pre>network wireless eapCACertificate</pre> <p>When prompted to enter the CA certificate, open the certificate with a text editor, copy and paste the content into the communications program.</p>

The content to be copied from the CA certificate does NOT include the first line containing "BEGIN CERTIFICATE" and the final line containing "END CERTIFICATE." If a certificate is installed, configure the following:

Whether to	Use this command
Verify the certificate	<pre>network wireless enableCertVerification <option1></pre> <p><option1> = <i>true</i> or <i>false</i></p>
Accept an expired or not valid certificate	<pre>network wireless allowOffTimeRangeCerts <option2></pre> <p><option2> = <i>true</i> or <i>false</i></p>
Make the connection successful by ignoring the "incorrect" system time	<pre>network wireless allowConnectionWithIncorrectClock <option3></pre> <p><option3> = <i>true</i> or <i>false</i></p>

- d. To determine which IP protocol (IPv4 or IPv6) is enabled and which IP address (IPv4 or IPv6) returned by the DNS server is used, configure the following parameters.

To set	Use this command
IP protocol	<pre>network ip proto <protocol></pre> <p><protocol> = <i>v4Only</i>, <i>v6Only</i> or <i>both</i></p>
IP address returned by the DNS server	<pre>network ip dnsResolverPreference <resolver></pre> <p><resolver> = <i>preferV4</i> or <i>preferV6</i></p>

- e. After enabling the IPv4 or IPv6 protocol in the earlier step, configure the IPv4 or IPv6 network parameters.

To set	Use this command
IPv4 configuration method	<pre>network ipv4 ipConfigurationMode <mode></pre> <p><mode> = <i>dhcp</i> (default) or <i>static</i></p>
IPv6 configuration method	<pre>network ipv6 ipConfigurationMode <mode></pre> <p><mode> = <i>automatic</i> (default) or <i>static</i></p>

- Configure the preferred host name for the IPv4 DHCP or IPv6 automatic configuration.

Note: The <version> variable in all of the following commands is either *ipv4* or *ipv6*, depending on the type of the IP protocol you have enabled.

To set	Use this command
Preferred host name (optional)	<pre>network <version> preferredHostName <name></pre> <p><name> = preferred host name</p>

Tip: To override the DHCP-assigned DNS servers with those you specify manually, type this command:

```
network <version> overrideDNS <option>
```

where <option> is *enable* or *disable*. See the table below for the commands for manually specifying DNS servers.

- For static IP configuration, configure these parameters.

To set	Use this command
Static IPv4 or IPv6 address	<pre>network <version> ipAddress <ip address></pre> <p><ip address> = static IP address</p>
IPv4 subnet mask	<pre>network ipv4 subnetMask <netmask></pre> <p><netmask> = subnet mask</p>
IPv4 or IPv6 gateway	<pre>network <version> gateway <ip address></pre> <p><ip address> = gateway's IP address</p>

To set	Use this command
IPv4 or IPv6 primary DNS server	<pre>network <version> primaryDNSServer <ip address></pre> <p><ip address> = IP address of the primary DNS server</p>
IPv4 or IPv6 secondary DNS server (optional)	<pre>network <version> secondaryDNSServer <ip address></pre> <p><ip address> = IP address of the secondary DNS server</p>

9. To quit the configuration mode, type either of the following commands, and press Enter.

Command	Description
<code>apply</code>	Save all configuration changes and exit.
<code>cancel</code>	Abort all configuration changes and exit.

The # prompt appears, indicating that you have quit the configuration mode.

10. To verify whether all settings are correct, type the following commands one by one.

Command	Description
<code>show network</code>	Show network parameters.
<code>show network ip all</code>	Show all IP configuration parameters.
<code>show network wireless details</code>	Show all wireless parameters.

Tip: You can type "show network wireless" to display a shortened version of wireless settings.

11. If all are correct, type `exit` to log out of the EMX. If any are incorrect, repeat Steps 7 to 10 to change network settings.

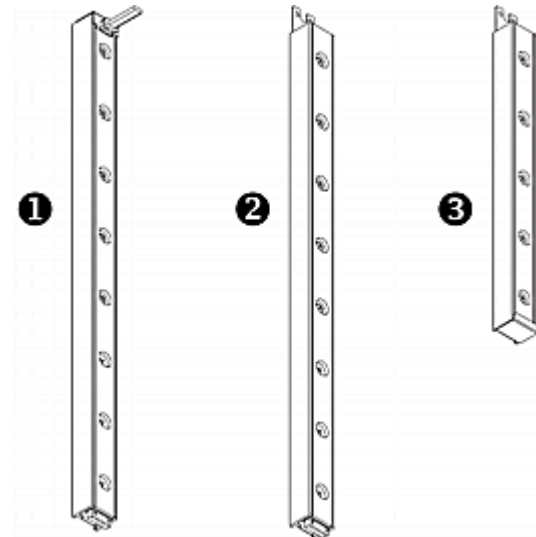
Combining Asset Sensors

Each tag port on the asset sensor corresponds to a rack unit and can be used to locate IT devices on a specific rack (or cabinet).

For each rack, you can attach asset sensors up to 64U long, consisting of one MASTER and multiple SLAVE asset sensors.

The difference between the master and slave asset sensors is that the master asset sensor has an RJ-45 connector while the slave does not.

The following diagram illustrates some asset sensors. Note that Raritan provides more types of asset sensors than the diagram.



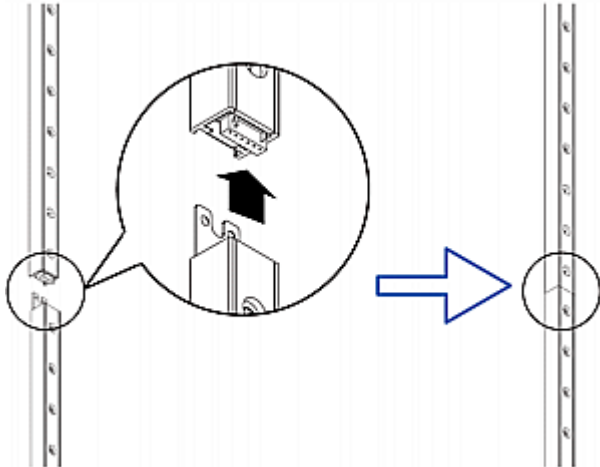
①	8U MASTER asset sensor with 8 tag ports
②	8U SLAVE asset sensor with 8 tag ports
③	5U "ending" SLAVE asset sensor with 5 tag ports

Note: Unlike regular slave asset sensors, which have one DIN connector respectively on either end, the ending slave asset sensor has one DIN connector on only one end. An ending asset sensor is installed at the end of the asset sensor assembly.

► To assemble asset sensors:

1. Connect a MASTER asset sensor to an 8U SLAVE asset sensor.
 - Plug the white male DIN connector of the slave asset sensor into the white female DIN connector of the master asset sensor.

- Make sure that the U-shaped sheet metal adjacent to the male DIN connector is inserted into the rear slot of the master asset sensor. Screw up the U-shaped sheet metal to reinforce the connection.



- Connect another 8U slave asset sensor to the one being attached to the master asset sensor in the same manner as Step 1.
- Repeat the above step to connect more slave asset sensors. The length of the asset sensor assembly can be up to 64U.
 - The final asset sensor can be 8U or 5U, depending on the actual height of your rack.
 - Connect the "ending" asset sensor as the final one in the assembly.
- Vertically attach the asset sensor assembly to the rack, next to the IT equipment, making each tag port horizontally align with a rack unit. The asset sensors are automatically attracted to the rack because of magnetic stripes on the back.

Note: The asset sensor is implemented with a tilt sensor so it can be mounted upside down.

Connecting Asset Sensors to the EMX

You need both asset sensors and asset tags for tracking IT devices.

Asset tags provide an ID number for each IT device. The asset tags are adhered to an IT device at one end and plugged in to an asset management sensor at the other.

The asset sensor is connected to a EMX, and the asset tag transmits the ID and positioning information to the asset sensor.

The following diagram illustrates an asset tag.



(A)	Barcode (ID number), which is available on either end of the asset tag
(B)	Tag connector
(C)	Adhesive area with the tape

Note: The barcode of each asset tag is unique and is displayed in the EMX device's web interface so it can easily be identified.

Connecting Composite Asset Sensors to the EMX

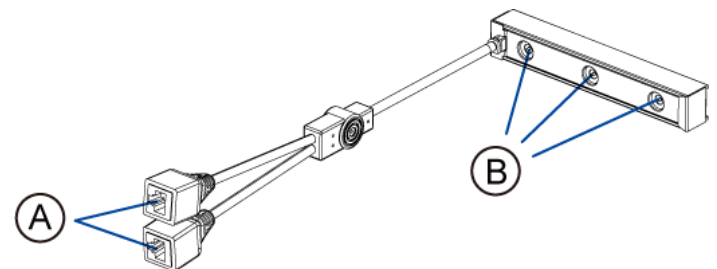
A composite asset sensor is named AMS-Mx-Z, where x is a number, such as AMS-M2-Z or AMS-M3-Z. It is a type of asset sensor that functions the same as regular MASTER asset sensors except for the following differences:

- It has two RJ-45 connectors.
- Multiple composite asset sensors can be daisy chained.
- A composite asset sensor contains less tag ports than regular asset sensors.

For example, AMS-M2-Z contains two tag ports and AMS-M3-Z contains three tag ports only.

The composite asset sensor is especially useful for tracking large devices such as SAN boxes in the cabinet.

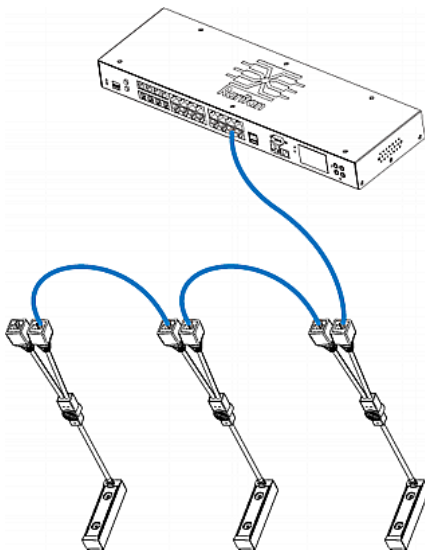
The following diagram illustrates AMS-M3-Z.



(A)	Two RJ-45 connectors
(B)	Tag ports

► **To connect composite asset sensors to the EMX device:**

1. Connect a composite asset sensor to the EMX device via a standard network patch cable (CAT5e or higher).
 - a. Connect one end of the cable to the RJ-45 port labeled "Input" on the composite asset sensor.
 - b. Connect the other end of the cable to the FEATURE port on the EMX device.
2. Affix an asset tag to the IT device. Then connect this asset tag to the composite asset sensor by plugging the tag connector into the tag port on the composite asset sensor. See **Connecting Asset Sensors to the EMX** (on page 7) for details.
3. If necessary, daisy chain *the same* type of composite asset sensors to track more IT devices.
 - a. Get a standard network patch cable that is within 2 meters.
 - b. Connect one end of the network cable to the RJ-45 connector labeled "Output" on the previous composite asset sensor.
 - c. Connect the other end of the cable to the RJ-45 connector labeled "Input" on the subsequent composite asset sensor.
 - d. Repeat the above steps to connect more composite asset sensors. See **Daisy-Chain Limitations of Composite Asset Sensors** (on page 8) for the maximum number of composite asset sensors supported per chain.
 - e. It is highly recommended using the cable ties to help hold the weight of all connecting cables.



4. Repeat Step 2 to connect IT devices to the other composite asset sensors in the chain.

Daisy-Chain Limitations of Composite Asset Sensors

There are some limitations when daisy chaining composite asset sensors -- AMS-Mx-Z, where x is a number.

- The maximum cable length between composite asset sensors is 2 meters.
- The maximum number of composite asset sensors that can be daisy chained vary according to the Raritan device.

Raritan devices	Maximum sensors per chain
EMX2-111, PX2 PDUs	Up to 4 composite asset sensors are supported.
EMX2-888, PX3 PDUs, PX3TS transfer switches	Up to 6 composite asset sensors are supported.

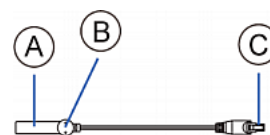
Connecting Blade Extension Strips

For blade servers, which are contained in a single chassis, you can use a blade extension strip to track individual blade servers.

Raritan's blade extension strip functions similar to a Raritan asset sensor but requires a tag connector cable for connecting to a tag port on the regular or composite asset sensor. The blade extension strip contains 4 to 16 tag ports, depending on which model you purchased.

The following diagrams illustrate a tag connector cable and a blade extension strip with 16 tag ports.

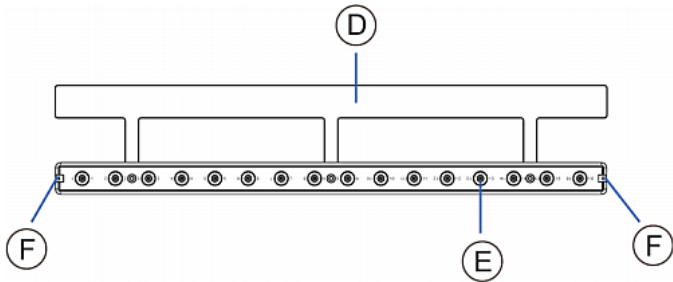
Tag connector cable



A	Barcode (ID number) for the tag connector cable
B	Tag connector
C	Cable connector for connecting the blade extension strip

Note: A tag connector cable has a unique barcode, which is displayed in the EMX device's web interface for identifying each blade extension strip where it is connected.

Blade extension strip

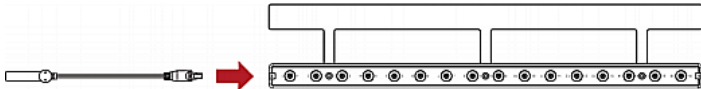


D	Mylar section with the adhesive tape
E	Tag ports
F	Cable socket(s) for connecting the tag connector cable

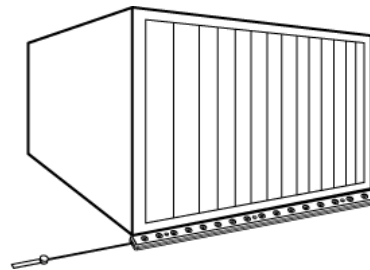
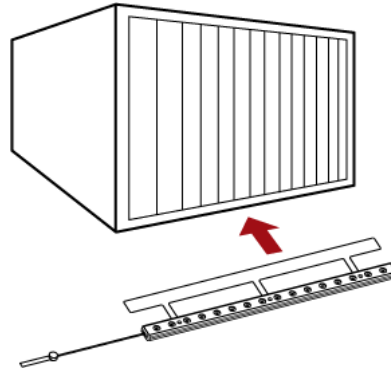
Note: Each tag port on the blade extension strip is labeled a number, which is displayed as the slot number in the EMX device's web interface.

► To install a blade extension strip:

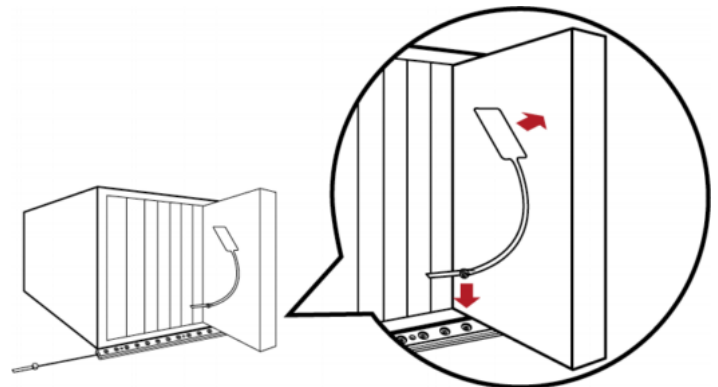
1. Connect the tag connector cable to the blade extension strip.
 - Plug the cable's connector into the socket at either end of the blade extension strip.



2. Move the blade extension strip toward the bottom of the blade chassis until its mylar section is fully under the chassis, and verify that the blade extension strip does not fall off easily. If necessary, you may use the adhesive tape in the back of the mylar section to help fix the strip in place.

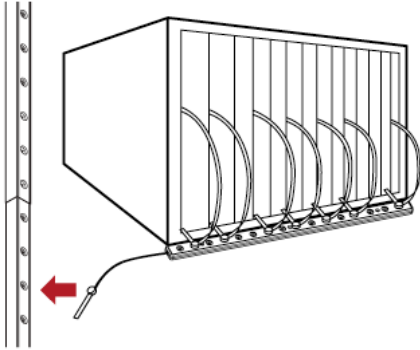


3. Connect one end of an asset tag to a blade server and connect the other end to the blade extension strip.
 - a. Affix the adhesive part of the asset tag to one side of a blade server through the tag's tape.
 - b. Plug the tag connector of the asset tag into the tag port on the blade extension strip.



4. Repeat the above step until all blade servers in the chassis are connected to the blade extension strip via asset tags.

5. Plug the tag connector of the blade extension strip into the closest tag port of the regular or composite asset sensor on the rack.



6. Repeat the above steps to connect additional blade extension strips and asset tags. Up to 128 asset tags on blade extension strips are supported per FEATURE port.

Note: If you need to temporarily disconnect the blade extension strip from the asset sensor, wait at least 1 second before re-connecting it back, or the EMX device may not detect it.

Connecting Contact Closure Environmental Sensors to EMX (Optional)

With Raritan environmental sensors connected, the EMX device can remotely monitor environmental factors, such as temperature and humidity, around the rack.

It is not guaranteed that all third-party detectors/switches are compatible with the EMX device. You need to test the compatibility after properly installing them.

The EMX2-888 provides two channels (on/off) for contact closure sensor termination points, allowing for direct connection of third-party contact closure detectors/switches.

If you have a device with a spring loaded terminal connector built in to the front device, see **EMX Devices with a Built In Terminal Module** (on page 10) and **EMX Devices with Removable Terminal Modules** (on page 11), respectively, based on your device model.

EMX Devices with a Built In Terminal Module

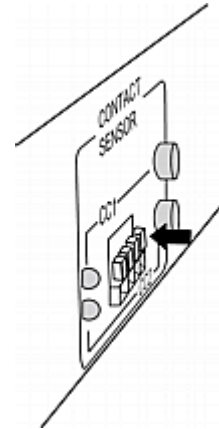
Follow these steps if you are using an EMX device with a spring loaded terminal module built in to the device. If you are using an EMX with a removable terminal module, see **EMX Devices with Removable Terminal Modules** (on page 11).

► To connect environmental sensors to EMX devices:

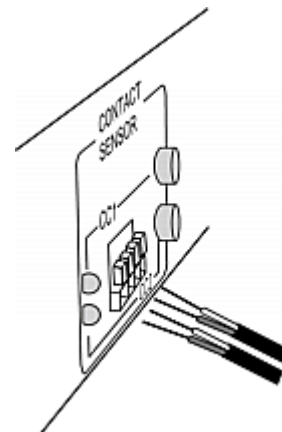
1. Plug one Raritan environmental sensor into one of the SENSOR ports on the EMX device. To connect additional sensors, repeat this step.

2. To connect two third-party probes to the termination points labeled CONTACT SENSOR, follow the procedure:
 - a. Strip the insulation around 12 mm from the end of each wire of discrete detectors/switches.
 - b. Press and hold down the tiny rectangular buttons above the termination points.

Note: Each button controls the spring of each corresponding termination point.



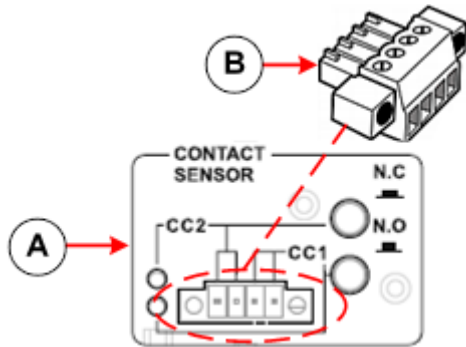
3. Fully insert each wire of both detectors/switches into each termination point.
 - Plug both wires of a detector/switch into the two termination points to the left.
 - Plug both wires of the other detector/switch into the two termination points to the right.



4. Release the tiny rectangular buttons after inserting the wires properly.
 - a. Verify that these wires are firmly fastened.
 - b. By default, the open status of the detector/switch is considered normal. To set the "normal" setting to "closed", press down the corresponding button adjacent to the termination points.

EMX Devices with Removable Terminal Modules

Follow these steps if you are using an EMX device with a removable terminal module. In this design, the contact sensor comprises two parts: contact sensor module and terminal module. The terminal module is removable.



(A)	Contact closure sensor
(B)	Removable terminal module

Four termination points are available. The two to the right (CC1) are associated with channel number 1 (as indicated by the LED number), and the two to the left (CC2) are associated with channel number 2.

With this design, there are two ways to plug discrete detectors/switches:

- Connect the discrete detectors/switches while the terminal module is attached to the EMX.
- Connect the discrete detectors/switches while the terminal module is separated from the EMX.

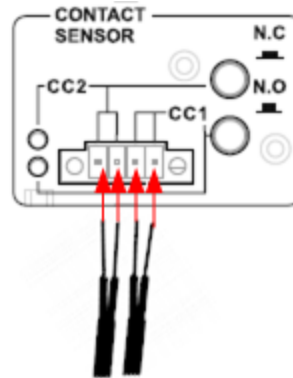
It is not guaranteed that all third-party detectors/switches are compatible with the EMX device. You need to test the compatibility after properly installing them.

Note: If the detector/switch connected to the contact closure sensor is Raritan's floor water sensor, verify that the total cable length from the SENSOR port of the EMX to the water detector does not exceed 30 meters/98 feet.

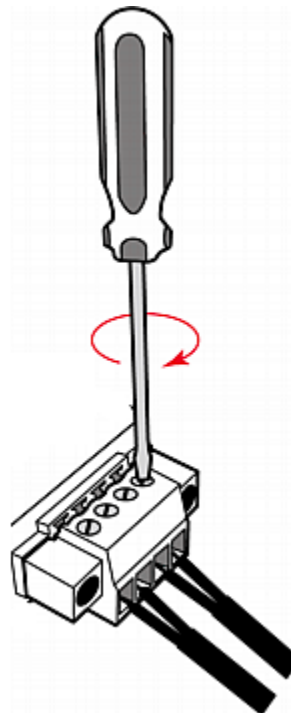
▶ To make connections when the terminal module is attached to the EMX console sensor:

1. Plug one Raritan environmental sensor into one of the SENSOR ports on the EMX device. To connect additional sensors, repeat this step.
2. Strip the insulation around 12 mm from the end of each wire of discrete detectors/switches.
3. Fully insert each wire of both detectors/switches into each termination point.
 - Plug both wires of a detector/switch into the two termination points to the left.

- Plug both wires of the other detector/switch into the two termination points to the right.



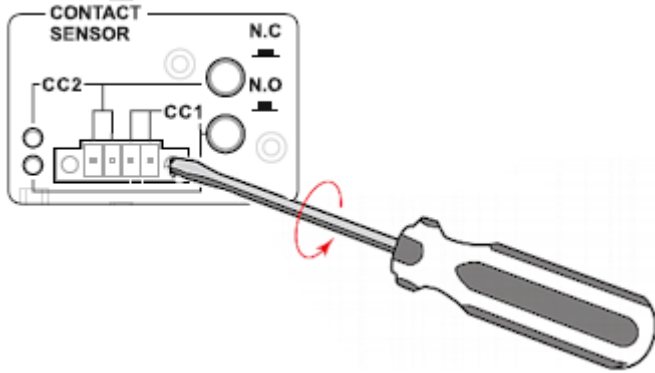
4. Use a screwdriver with a 2.5 mm wide shaft to tighten the screws above each termination point to secure the wires, using a torque of 0.196 N·m (2 kgf·cm).



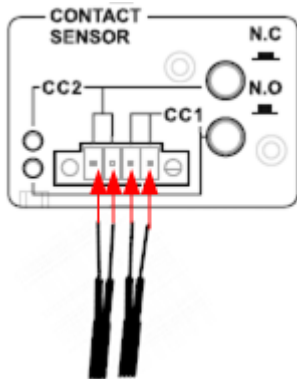
▶ To make connections when the terminal module is separated:

1. Loosen the two screws on each side of the terminal module.

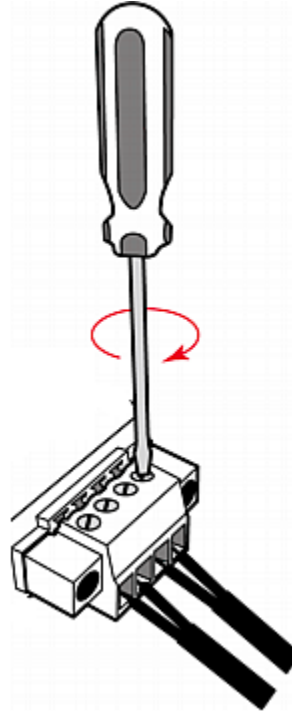
Note: The two screws are not removable, so just loosen them.



2. Separate the terminal module from the CONTACT SENSOR panel.
3. Strip the insulation around 12 mm from the end of each wire of discrete detectors/switches.
4. Fully insert each wire of both detectors/switches into each termination point.
 - Plug both wires of a detector/switch into the two termination points to the left.
 - Plug both wires of the other detector/switch into the two termination points to the right.



5. Use a screwdriver with a 2.5 mm wide shaft to tighten the screws above each termination point to secure the wires, using a torque of 0.196 N·m (2 kgf·cm).



6. Plug the terminal module back into the CONTACT SENSOR panel.
7. Tighten the two screws on each side of the terminal module to secure it onto the CONTACT SENSOR panel.

What to Do Next

1. Open a web browser and type the IP address of the EMX device.
2. When prompted for a user name and password, enter *admin* and the new password you assigned during the initial network configuration.
3. The EMX page opens.
4. Choose Device Settings > Date/Time to configure EMX with the proper date and time or synchronize it with an NTP server. EMX's time must be in sync with the LDAP server to use LDAP authentication.
5. Configure each asset sensor assembly in the web interface.
 - a. Locate the Feature Ports folder in the left pane, which contains a list of asset sensor icons.

Note: If there is only one FEATURE port on your EMX device, only one asset sensor icon is available.

- b. Click the desired asset sensor icon in the left pane.
- c. Click Setup in the right pane. The setup dialog for the selected asset sensor assembly appears.

- d. Provide necessary information, including the desired name for the asset sensor assembly, the total number of rack units (tag ports), orientation of the asset sensor assembly and so on.
6. EMX is sent from the factory with all the AMS LEDs set to the Automatic Operation mode. The LED color on the asset sensor changes according to whether an asset tag is detected. You can configure the LED color settings from the web interface:
 - a. Click the desired asset sensor icon in the left pane.
 - b. Select the desired rack unit (tag port) in the right pane.
 - c. Click Configure Rack Unit to configure the rack unit settings, including the LED mode and colors.
7. Use the menu at the top of the page to create user profiles, set privileges and security. Use the tree in the left pane to configure asset sensors and environmental sensors.

Note: Detailed instructions are available in the **EMX Online Help**.

Additional Information

For more information about the EMX and the entire Raritan product line, see Raritan's website (www.raritan.com). For technical issues, contact Raritan Technical Support. See the Contact Support page in the Support section on Raritan's website for technical support contact information worldwide.

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