

## Installing the ExtremeWireless Appliance C5215



**Electrical Hazard:** Only qualified personnel should perform installation procedures.



**Caution:** An antistatic wrist strap is required to perform the following procedures to minimize ESD damage to the devices involved.

### Verifying the C5215 Box Contents

Unpack your appliance and verify the contents of the box as follows:

**Table 1 Contents of the C5215 Box**

Quantity	Item
1	C5215 Quick Reference
1	ExtremeWireless C5215 Controller
The following hardware is included:	
2	Rack handles and appropriate screws
1	AC power cord bracket and cable clamp kit
1	Rack mounting kit
1	Front panel bezel



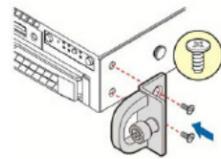
**Note:** The power cord needs to be purchased separately for the respective deployment country. They can be ordered at <http://www.extremenetworks.com/product/powercords/>

### Mounting the Appliance

If you are installing the appliance in a rack:

- 1 Install the rack handles by aligning a rack handle with the two holes on each the side of the server system and attaching each handle to the server system with two screws as shown in Figure 1.

**Figure 1 Installing the Rack Handles**



- 2 Read the *Installation Guide* included with the rack mounting kit.
- 3 Install the rails and mount the appliance in the rack as instructed.

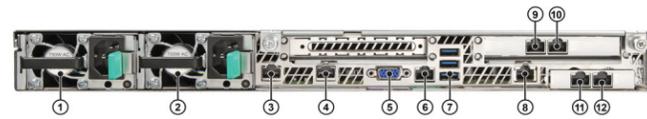
If you are table mounting the appliance, ensure at least 6 cm of clearance on all sides of the appliance for proper ventilation.

### Connecting to a Power source

Refer to Figure 2 for the location of the back panel features.

- 1 Optionally, attach the power cord bracket and nylon cable clamp tie:
  - a Using the two nuts shipped with the bracket, attach the bracket to the chassis tab to the right of Power Supply 2.
  - b Push the arrowhead end of the cable clamp tie into the hole in the bracket to anchor the tie.
- 2 Connect the two AC power cables to power supplies 1 and 2. These two power supplies combine to create a redundant power supply.
- 3 Optionally, wrap the cable clamp tie around the power cables and fasten the end of the tie under the hook at the head of the tie.
- 4 Plug the other end of the cables into grounded electrical outlets or to separate power sources such as an uninterrupted power supply (UPS) or a power distribution unit (PDU).
- 5 Power on the appliance. The power button is on the front control panel as shown in Figure 3 and Figure 4.

**Figure 2 C5215 Back Panel Layout**



- |                                |                                     |
|--------------------------------|-------------------------------------|
| 1 Power Supply Module #1       | 8 RMM4 NIC Port (not used, plugged) |
| 2 Power Supply Module #2       | 9 Data Port 1, 1GbE RJ45(esa0)      |
| 3 Mgmt Port, 1 GbE RJ45 (eth0) | 10 Data Port 2, 1GbE RJ45(esa1)     |
| 4 Port 2 (not used, plugged)   | 11 Data Port 3, 1/10GbE SFP+(esa2)  |
| 5 Video Connector              | 12 Data Port 4, 1/10GbE SFP+(esa3)  |
| 6 RJ45 Serial-A Port           |                                     |
| 7 USB 2.0/3.0 Ports            |                                     |

**Figure 3 C5215 Front Panel Layout**

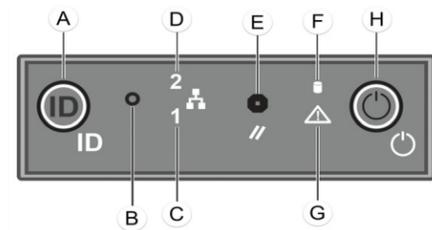


- |                         |                     |
|-------------------------|---------------------|
| 1 Hard disk Drive Bays  | 3 USB 2.0/3.0 Ports |
| 2 Front Video Connector |                     |



**Note:** Although the appliance has 5 USB connectors (2 on the front panel and 3 on the back panel), only one USB connector can be in use at any one time.

**Figure 4 Front Control Panel**



- |                                      |                                  |
|--------------------------------------|----------------------------------|
| A System ID Button w/ Integrated LED | F Drive Activity LED             |
| B NMI Button                         | G System Status LED              |
| C Mgmt Port Activity LED             | H Power Button w/ Integrated LED |
| D Not Used                           |                                  |
| E System Cold Reset Button           |                                  |

### Hard Drive LED Indicator Patterns

The hard drive has two LED indicators visible from the front of the system — one is a green LED for disk activity, and the other is amber and indicates hard drive status. The LEDs have the following states, as described in Table 2 and Table 3.

**Table 2 Hard Drive Activity LED Indicator Patterns**

Hard Drive Condition	Activity LED Patterns
Power on and drive spinning up or spinning down	Off
Power on with drive activity	Blinking green

**Table 3 Hard Drive Status LED Indicator Patterns**

Hard Drive Condition	Status LED Patterns
No access or no fault	Off
Hard drive fault has occurred	Solid amber

### Attaching the Front Bezel

The appliance comes with an optional front panel bezel, which can be attached to the front of the chassis by snapping it on the rack handles. A key lock allows you to lock the bezel in place to restrict access to the controls on the front panel. You can monitor the system status indicators with the bezel in place.

Before installing the bezel, you must install the rack handles as shown in Figure 1.

- 1 Lock the right end of the front bezel to the rack handle (see letter “A” in Figure 5).
- 2 Rotate the front bezel clockwise until the left end clicks into place (see letter “B” in Figure 5).
- 3 Lock the bezel if needed.

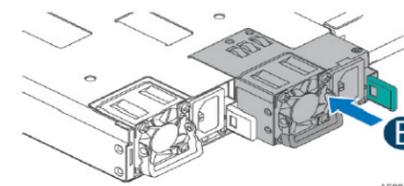
**Figure 5 Attaching Optional Bezel**



### Installing a Power Supply

If you are installing a power supply:

- 1 Remove the insert from the chassis power supply bay.
- 2 Insert the power supply module into the power supply bay.



- 3 Push the power supply module into the bay until it locks into place.

### Removing a Power Supply

If you are removing a power supply:

- 1 Detach the power supply cord from the power supply that needs to be removed.
- 2 Pull the power supply module using the handle, while pushing the latching tab outward to disengage the power supply from the unit.

### Replacing a Power Supply

The appliance has two power supplies, supplying hot-pluggable power redundancy. The system distributes the power load across both power supplies to maximize efficiency. When a power supply is removed with the system powered on, the full power load is picked up by the remaining power supply.



**Note:** The system ships with just one power supply and you have the option to purchase the additional power supply (Ordering Part No. 30522 WS-PSI-C5215-750W-01).



**Note:** The system requires one power supply to operate the system normally. Remove and replace only one power supply at a time in a system that is powered on.

Each power supply has a single bi-color LED to indicate power supply status, as described in Table 4.

**Table 4 Power Supply Status LED Indicator Patterns**

Power Supply Condition	LED Pattern
Output on and OK	Green
No AC power to all power supplies	Off
AC present / Only 12VSB on (PS off) or PS in cold redundant state	1Hz Blinking Green
AC power cord unplugged or AC power lost. With a 2nd PS in parallel still with AC input power	Amber
Power supply warning events where PS continues to operate — high temp, high power, high current, slow fan	1Hz Blinking Amber

**Table 4 Power Supply Status LED Indicator Patterns**

Power Supply Condition	LED Pattern
Power supply critical event causing a shutdown, failure, OCP, OVP, fan fail	Amber
Power supply firmware updating	2Hz Blinking Green

### Configuring the C5215



**Note:** The C5215 controller ships with preloaded software and the minimum software version supported by this platform is 10.41.01.

A Configuration Wizard guides you through the initial system configuration steps that are necessary to deploy the appliance. The wizard is automatically launched when an administrator logs into the appliance for the first time.

Alternatively, you may still elect to provision the system by means of direct element configuration as described in detail in the *Extreme Networks ExtremeWireless Getting Started Guide*.

For detailed configuration information, refer to the *ExtremeWireless User Guide* located on the Documentation page at the following link:

[www.extremenetworks.com/support/documentation/](http://www.extremenetworks.com/support/documentation/)

### Configuring the Management Interface

You can retain the default IP address of the appliance's management interface if you do not intend to connect the appliance to your enterprise network. If you do intend to connect the appliance to your network:

- 1 Connect a laptop to the management port of the appliance.
- 2 Configure the Ethernet port of the laptop with a statically assigned unused IP address in the 192.168.10.0/24 subnet.
- 3 Launch your Web browser and in the browser address bar, type <https://192.168.10.1:5825>. (192.168.10.1 is the default IP address on the appliance's management port.) The Extreme Networks Wireless Assistant logon screen is displayed.
- 4 Type “admin” as the User Name and “abc123” as the Password.
- 5 Click Login.
- 6 Use the Configuration Wizard, or manually configure using the UI by clicking Controller from the top menu.
- 7 To configure Hostname, Domain, and DNS Servers, click Controller from the top menu.
- 8 In the left pane, select Administration and then click Host Attributes.
- 9 Type the following information:
  - Host Name - The name of the C5215.
  - Domain Name - The IP domain name of the enterprise network.
- 10 Type the DNS Server used by the network into the Server Address and click Add Server.
- 11 Repeat the same process for other DNS servers. Click Save.
- 12 To configure IP Addresses, in the left pane, select Network. Then, click Topology.
- 13 Click the Topology tab. Click Admin from the Topology list.
- 14 Type the following information:
  - Static IP Address -The new IP address for the C5215 management port. Change this as appropriate for the enterprise network.
  - Mask - The appropriate subnet mask for the IP address to separate the network portion from the host portion of the address (typically 255.255.255.0).
  - Gateway -The default gateway of the network.
- 15 Click Save. The IP addresses are now set to the network you defined. The Web connection between the laptop and the appliance is ended.
- 16 Disconnect your laptop from the appliance's management port.
- 17 Connect the appliance's management port to the enterprise Ethernet LAN.
- 18 Log on to the Extreme Networks Wireless Assistant. The system is now visible to the enterprise network.

## Configuring the System

Before you begin configuration:

- Research the type of WLAN deployment that is required. For example, SSIDs, security requirements, and filter policies.
  - Prepare the network. Ensure that optional external servers (for example, DHCP and RADIUS servers) are available and appropriately configured.
- Using the Extreme Networks Wireless Assistant, configure the IP addresses of the appliance's data ports (esa0-esa3).
    - Configure the default IP addresses to be the relevant subnet point of attachment to the existing network, and set up the routing protocol table.
    - Configure the data ports to be on separate VLANs.
    - To manage the appliance through the interface, select the Mgmt checkbox on the Interfaces tab.
  - Select the time zone.
  - Install the appliance license and confirm the latest firmware version is loaded.
  - Configure the VNS.
  - Install, register, and assign Wireless APs to the VNS.

For information on installing and powering the Wireless APs, see the Extreme Networks Wireless documentation at: [www.extremenetworks.com/support/documentation/](http://www.extremenetworks.com/support/documentation/)

## Connecting the Data Ports

Data ports 1 and 2 are 1 GbE RJ45 ports.

To connect twisted pair cabling:

- Ensure that the device to be connected at the other end of the segment is powered on.
- Connect the twisted pair segment to the appliance by inserting the RJ45 connector on the twisted pair segment into the desired RJ45 port.
- Verify that a link exists by checking that the Activity Link LED is on (solid green or blinking green). If the Activity Link LED is off, perform the following steps until it is on:
  - Verify that the cabling being used is Category 5 or better with an impedance between 85 and 111 ohms with a maximum length of 100 meters (328 feet).
  - Verify that the device at the other end of the twisted pair segment is on and properly connected to the segment.
  - Verify that the RJ45 connectors on the twisted pair segment have the proper pinouts and check the cable for continuity.
- If a link is not established, contact Extreme Networks.

Data ports 3 and 4 provide SFP+ ports that can support both 1 G and 10G pluggable transceivers. Refer to the datasheet at the following location for a list of pluggable transceivers supported for the C5215: [www.extremenetworks.com/products/transceivers](http://www.extremenetworks.com/products/transceivers)

To install an SFP+ transceiver:

- With an antistatic wrist strap attached to your wrist, remove the transceiver from its packaging. If there is a protective dust cover in the transceiver connector, do not remove it at this time.
- Hold the transceiver so that the connector will seat properly.
- Carefully align the transceiver with the port slot.
- Push the transceiver into the port slot until it "clicks" and locks into place.

To connect cables to SFP+ ports:

- Remove the protective covers from the SFP+ and from the connectors on each end of the cable.
- Insert the cable connector into the SFP+ connector until it clicks into place.
- Plug the other end of the cable into the appropriate port on the other device. Some fiber-optic cables may be terminated at the other end with two separate connectors, one for each fiber-optic strand. In this case, ensure that the transmit fiber-optic strand from the appliance is connected to the receive port of the other device, and the receive fiber-optic strand on the appliance is connected to the transmit port of the other device.
- If an SFP+ port is unused, install a dust cover.



**Warning:** Fiber-optic SFP+s use Class 1 lasers. Do not use optical instruments to view the laser output. The use of optical instruments to view laser output increases eye hazard. When viewing the output optical port, power must be removed from the network adapter.

**Table 5 RJ45 Port LEDs (Management Port)**

LED Type	LED Pattern	Status Indication
Network Speed (Right)	Off	10 Mbps
	Amber	100 Mbps
	Green	1000 Mbps
Link Activity (Left)	Off	No link
	Solid Green	Active link
	Blinking Green	Data traffic activity

**Table 6 Port LEDs (Data Ports 1 and 2)**

LED Type	LED Pattern	Status Indication
Network Speed (Right)	Off	10 Mbps
	Green	100 Mbps
	Amber	1000 Mbps
Link Activity (Left)	Off	No link
	Solid Green	Active link
	Blinking Green	Data traffic activity

**Table 7 SFP+ Port LEDs (Data Ports 3 and 4)**

LED Type	LED Pattern	Status Indication
Network Speed (Right)	Off	Not used
	Amber	1 Gbps
	Green	10 Gbps
Link Activity (Left)	Off	No link
	Solid Green	Active link
	Blinking Green	Data traffic activity

## Regulatory Compliance Information

For complete regulatory compliance and safety information, refer to the document *Intel® Server Products Product Safety and Regulatory Compliance*, available at the following links:

[http://download.intel.com/support/motherboards/server/sb/g23122003\\_safetyregulatory.pdf](http://download.intel.com/support/motherboards/server/sb/g23122003_safetyregulatory.pdf)

<https://extranet.extremenetworks.com/downloads/Pages/WirelessControllers.aspx>

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This product 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 product uses, generates, and can radiate radio frequency energy and if not installed and used in accordance with the manufacturer's instruction manual, may cause harmful interference to radio communications. Operation of this product in a residential area is likely to cause harmful interference, in which case you will be required to correct the interference at your own expense.

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Hillsboro, OR 97124-6497  
Phone: 1-800-628-8686

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This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of the Canadian Department of Communications.

Cet appareil numérique respecte les limites bruits radioélectriques applicables aux appareils numériques de Classe A prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques", NMB-003 édictée par le Ministère Canadian des Communications.

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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.

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部件名称 (Parts)	有毒有害物质或元素 (Hazardous Substance)					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr <sup>6+</sup> )	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
金属部件 (Metal Parts)	×	○	○	○	○	○
电路模块 (Circuit Modules)	×	○	○	○	○	○
电缆及电缆组件 (Cables & Cable Assemblies)	×	○	○	○	○	○
塑料和聚合物部件 (Plastic and Polymeric parts)	○	○	○	○	○	○
电路开关 (Circuit Breakers)	○	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。  
Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the SJ/T 11363-2006 standard.

×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求。  
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This table shows where these substances may be found in the supply chain of Extreme's electronic information products, as of the date of sale of the enclosed product. Note that some of the component types listed above may or may not be a part of the enclosed product.

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- 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.
- 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.
- 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 Customer Support at 353 61 705500 (Ireland).

# Extreme Networks™ Appliance C5215

## Quick Reference

P/N 30136

WS-C5215 WLAN CONTROLLER

## Notice

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