# Dell Networking W-7205 Controller Installation Guide



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# **Contents**

Contents	3
Preface	7
Guide Overview	7
Related Documentation	7
Contacting Dell	7
W-7205 Controller	9
Packaging Checklist	9
W-7205 Components	10
Dual-Media Ports	11
10/100/1000BASE-T (RJ-45) Ports	11
1000BASE-X (SFP) Ports	12
Dual-Media Port LEDs	12
10GBASE-X Ports	13
SFP/SFP+ Modules and DAC Cables	14
USB Interface	15
Serial Console Port	15
Serial Console Port Adapter	16
Micro-USB Console Port	16
Micro-USB Driver	16
Management Port	16
Power, Status, and Peered LEDs	17
LCD Panel	17
LCD Menu	17
Disabling the LCD Screen	18
CPU Module	19
Power Supply	19

Grounding Point	19
Installation	21
Precautions	21
Selecting a Location	22
Rack Mounting - Standard/Front	22
Required Tools and Equipment	22
Installation Steps	23
Rack Mount Installation- Mid	23
Required Tools and Equipment	24
Installation Steps	24
Table or Shelf Installation	25
Required Tools and Equipment	25
Installation Steps	25
Wall Mounting	25
Required Tools and Equipment	26
Installation Steps	26
Connecting and Disconnecting the AC Power Cord	27
Connecting the AC Power Cord	27
Disconnecting the AC Power Cord	28
Installing an SFP/SFP+ Module	28
Connecting an LC Fiber Optic Cable	28
Disconnecting an LC Fiber Optic Cable	29
Removing an SFP/SFP+ Module	29
Specifications, Safety, and Compliance	31
W-7205 Specifications	31
Physical	31
Power Supply Specifications	31
Operating Specifications	31
Storage Specifications	31
Safety and Regulatory Compliance	31
Regulatory Model Name	32
Electromagnetic Interference	32

United States		32
Canada		32
Europe		33
Japan VCCI		33
Taiwan (BSMI)		33
South Korea		33
EU Regulatory Conformance		33
Battery Statements		33
Proper Disposal of Dell Equipment		34
Waste of Electrical and Electronic	Equipment	34
European Union RoHS		34
·		



#### **Preface**

This document describes the hardware features of the Dell Networking W-7205 Controller. It provides a detailed overview of the physical and performance characteristics of the controller and explains how to install the controller and its accessories.

#### **Guide Overview**

- W-7205 Controller on page 9 provides a detailed hardware overview of the W-7205 controller and its components.
- Installation on page 21 describes how to install the W-7205 controller and its components.
- Specifications, Safety, and Compliance on page 31 provides the W-7205 controller's technical specifications and safety and regulatory compliance information.

#### **Related Documentation**

Refer to the latest *Dell Networking W-Series ArubaOS User Guide* and *Dell Networking W-Series ArubaOS CLI Reference Guide* for complete management of the controller.

## **Contacting Dell**

**Table 1:** Contact Information

Web Site Support	
Main Website	dell.com
Contact Information	dell.com/contactdell
Support Website	dell.com/support
Documentation Website	dell.com/support/manuals



# **Chapter 1**

#### W-7205 Controller

The W-7205 Controller is a wireless LAN controller that connects, controls, and intelligently integrates wireless Access Points (APs) and Air Monitors (AMs) into a wired LAN system.

There are two models of the W-7205 controller that do not differ physically or functionally from each other.

- W-7205-US: For the United States of America
- W-7205-RW: For the rest of the world

The W-7205 controller has the following port specification:

**Table 2**: W-7205 Controller Port Specification

Model	Ports	Number of APs Supported	Number of Users Supported
W-7205	<ul> <li>4 x dual-media (10/100/1000BASE-T and 1000BASE-X)</li> <li>2 x 10GBASE-X</li> </ul>	256	8192



NOTE: The W-7205 controller requires Dell Networking W-Series ArubaOS 6.4.3.1 or later version.

## **Packaging Checklist**



NOTE: Inform your supplier if there are any incorrect, missing, or damaged parts. If possible, retain the carton, including the original packing materials. Use these materials to repack and return the unit to the supplier, if needed.

**Table 3:** Package Contents

Item	Quantity
W-7205 Controller	1
Standard Mounting Brackets	2
M6 x 15 mm Phillips Pan Head Screws	4
M4 x 8 mm Phillips Flat Head Screws	8
M6 x 7 mm Grounding Screws	2
M6 Cage Nut	4
M6 Clip Nut	4
AC Power Cord Retaining Clip	1

**Table 3:** Package Contents

Item	Quantity
Power Cable	1
Micro-USB Cable	1
Rubber Feet	4
Installation Guide (this document, printed)	1
Quick Start Guide (Printed)	1
Dell Safety, Environment, and Regulatory Information (printed)	1
Dell Warranty and Support Information (printed)	1
Dell Software License Agreement (printed)	1



NOTE: Optional accessories are available for use with the Dell W-7205 controller and are sold separately. Contact your Dell sales representative for details and assistance.

# W-7205 Components

This section introduces the different components of the W-7205 controller, and specifies their locations in the controller. Figure 1 shows the front panel of the W-7205 controller and Figure 2 shows the back panel of the W-7205 controller.

Figure 1 Front Panel of the W-7205 Controller

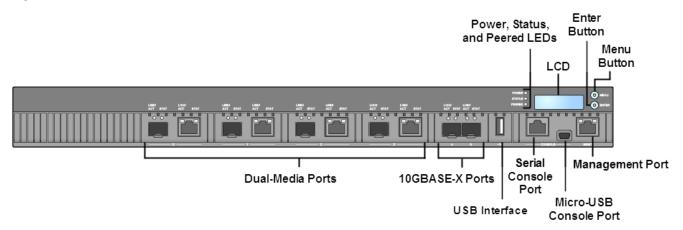
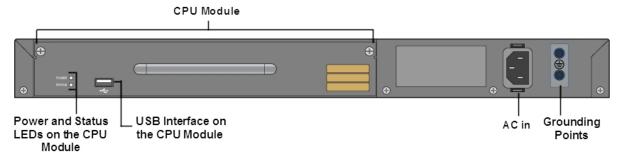


Figure 2 Back Panel of the W-7205 Controller



The following table lists the different components of the W-7205 controller:

Table 4: W-7205 Controller Components

Component	Description	Page
Dual-Media ports	4 x dual-media (10/100/1000BASE-T and 1000BASE-X) ports	
10GBASE-X ports	2 x 10GBASE-X ports	<u>13</u>
USB interface	Allows uploading configuration and image from a USB 2.0 storage device.	<u>15</u>
Serial console port	RJ-45 serial console access port for direct local management	<u>15</u>
Micro-USB console port	Micro-USB console access port for direct local management	<u>16</u>
Management port	Allows connection to a separate management network	<u>16</u>
Power, Status, and Peered LED	Provides basic monitoring of the controller 1	
LCD	Allows configuration of LCD behavior and other basic operations	
Enter button	Allows execution of actions on the LCD Screen	
Menu button	Allows selection of the LCD screen menu	
CPU Module	CPU module	<u>19</u>
Power and Status LEDs on the CPU module	Provides basic monitoring of the CPU module	
USB Interface on the CPU module	Serves the same purpose as the USB interface on the front panel	
AC in	AC power connector	<u>19</u>
Grounding points	Provided for attaching the grounding	<u>19</u>

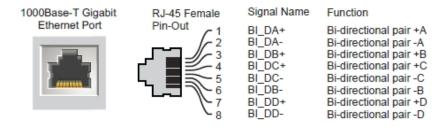
#### **Dual-Media Ports**

The W-7205 controller is equipped with four sets of dual-media ports (ports 0 through 3). These ports can utilize either a 1000BASE-X or 10/100/1000BASE-T connection provided. However, the 1000BASE-X fiber connection has priority over the 10/100/1000BASE-T copper connection. If a link is detected on the 1000BASE-X interface, the 10/100/1000BASE-T connection will be disabled.

#### 10/100/1000BASE-T (RJ-45) Ports

The W-7205 controller is equipped with four 10/100/1000BASE-T copper ports, as a part of dual-media ports. Gigabit Ethernet uses all eight wires and each pair is used in a bi-directional fashion, meaning the same pairs are used for both data transmission and reception. Figure 3 illustrates the CAT-5 pin-out on an RJ-45 connector. The CAT-5 pin-out pairs the following pins on a 10/100/1000BASE-T Gigabit Ethernet port: 1/2, 3/6, 4/5, and 7/8.

Figure 3 10/100/1000BASE-T Port Pin Out



#### 1000BASE-X (SFP) Ports

The W-7205 controller is equipped with four 1000BASE-X dual-media ports for fiber connectivity only and are intended for use with SFPs (mini-GBICs).

#### **Dual-Media Port LEDs**

Each port is equipped with two LEDs that allow basic monitoring of status, activity, and configuration of the port.

- LINK/ACT— Placed above the port to the left, this LED displays the link status and activity of the port.
- STATUS— Placed above the port to the right, this LED displays the status of the port. The information displayed by this LED changes based on the LCD mode. The LED behavior corresponding to each LCD mode is listed in Table 5 and Table 6.

Table 5: 10/100/1000BASE-T Port LEDs

LED	Function	LCD Mode	Indicator	Status
LINK/ACT	Link status	Link status	Green (Solid)	Link established
			Green (Blinking)	Port is transmitting or receiving data
			Off	No link
STATUS	Port status	Administrative	Green (Solid)	Port enabled
			Off	Port administratively disabled
		Duplex	Green (Solid)	Full-duplex
			Off	Half-duplex
		Speed	Green (Solid)	1000 Mbps
			Off	10/100 Mbps

Table 6: 1000BASE-X Port LEDs

LED	Function	LCD Mode	Indicator	Status
LINK/ACT	Link status	Link status	Green (Solid)	Link established
			Green (Blinking)	Port is transmitting or receiving data
			Off	No link

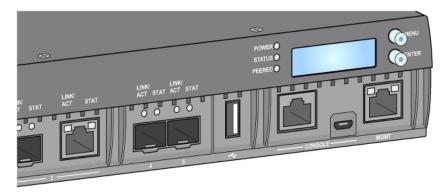
Table 6: 1000BASE-X Port LEDs

LED	Function	LCD Mode	Indicator	Status
STATUS	Port status	Administrative	Green (Solid)	Port enabled
			Off	Port administratively disabled
		Duplex	Green (Solid)	Full-duplex
			Off	NA
		Speed	Green (Solid)	1 Gbps
			Off	NA

#### **10GBASE-X Ports**

The W-7205 controller is equipped with two 10GBASE-X (SFP+) ports (4 and 5). These ports are intended for use with SFP/SFP+ and support dual-speed (1GbE or 10GbE) operation.

Figure 4 10GBASE-X Ports and LEDs



Each port is equipped two LEDs that allow basic monitoring of status, activity, and configuration of the port.

- LINK/ACT— Placed to the top left of the port, this LED displays the link status and activity of the port.
- STATUS— Placed to the top right of the port, this LED displays the status of the port. The information displayed by this LED changes based on the LCD mode. The LED behavior corresponding to each LCD mode is listed in Table 7.

**Table 7**: 10GBASE-X Port LEDs

LED	Function	LCD Mode	Indicator	Status
LINK/ACT	Link status	NA	Green (Solid)	Link established
			Green (Blinking)	Port is transmitting or receiving data
			Off	No link

**Table 7:** 10GBASE-X Port LEDs

LED	Function	LCD Mode	Indicator	Status
STATUS	Port status	Administrative	Green (Solid)	Port enabled
			Off	Port administratively disabled
		Duplex	Green (Solid)	Full-duplex
			Off	NA
		Speed	Green (Solid)	10 Gbps
			Off	1 Gbps

#### SFP/SFP+ Modules and DAC Cables

SFP/SFP+ modules (purchased separately), also known as mini-GBICs are hot-swappable, provide optical or copper connections to other devices.

Direct attach cables (DACs) are installed in a 10GBASE-X port in the same manner as an SFP/SFP+ module.

For the list of Dell approved SFP/SFP+ modules and DAC cables for controllers, see Table 8 and Table 9.



NOTE: Other non-approved third-party optics or DAC cables are not tested or supported by Dell on controllers; therefore, Dell does not guarantee their proper functionality when used with Dell controllers.



NOTE: SFP/SFP+ Modules and DAC cables are sold separately. Contact your Dell sales representative for details and assistance.

For information on how to install an SFP/SFP+ module or a DAC cable, see "Installing an SFP/SFP+ Module" on page 28.

**Table 8:** Supported SFP/SFP+ Modules

SFP/SFP+	Description
SFP-SX	SFP, 1000BASE-SX, LC Connector; 850nm pluggable GbE optic; up to 300 meters over multi-mode fiber (Type OM2).
SFP-LX	SFP, 1000BASE-LX, LC Connector; 310nm pluggable GbE optic; up to 10,000 meters over single-mode fiber.
SFP-TX	SFP, 1000BASE-T SFP; copper GbE pluggable; RJ45 connector; up to 100 meters over Category-5, 5e, 6 and 6a unshielded twisted pair cable.  NOTE: Supported only in ports 4 and 5.
SFP-EX	1000BASE-ZX SFP; 1310nm pluggable GbE optic; LC connector; up to 40,000 meters over single-mode fiber
SFP-ZX	1000BASE-ZX SFP; 1310nm pluggable GbE optic; LC connector; up to 70,000 meters over single-mode fiber
SFP-10G-SR	SFP+, 10GBASE-SR, 850nm serial pluggable SFP+ optic, target range 300m over MMF, LC Connector.
SFP-10G-LR	SFP+, 10GBASE-LR, 1310nm serial pluggable SFP+ optic for up to 10km over SMF, LC Connector
SFP-10G-LRM	SFP+, 10GBASE-LRM, 1310nm serial pluggable SFP+ optic, long-reach multimode, LC Connector

**Table 8:** Supported SFP/SFP+ Modules

SFP/SFP+	Description
SFP-10G-ER	SFP+, 10GBASE-ER, 1310nm pluggable 10GE optic; up to 40,000 meters over single-mode fiber, LC connector
SFP-10G-ZR	SFP+, 10GBASE-ZR, 1310nm pluggable 10GE optic; up to 70,000 meters over single-mode fiber, LC connector

**Table 9**: Supported DAC Cables

DAC	Description
DAC-SFP-10GE-50CM	50cm Direct Attach Cable; 10G SFP+
DAC-SFP-10GE-1M	1m Direct Attach Cable; 10G SFP+
DAC-SFP-10GE-3M	3m Direct Attach Cable; 10G SFP+
DAC-SFP-10GE-5M	5m Direct Attach Cable; 10G SFP+
DAC-SFP-10GE-7M	7m Direct Attach Cable; 10G SFP+

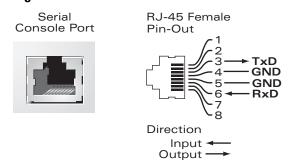
#### **USB** Interface

The W-7205 controller is equipped with two USB 2.0 interfaces; one on the front panel of the controller and the other on the CPU module in the back panel of the controller. A USB storage device can be used to save configurations, upload configurations, and upgrade image to the controller. USB functions are controlled through the LCD panel on the front of the controller. For more information on the LCD panel and its functions, see "LCD Panel" on page 17.

#### **Serial Console Port**

For direct local management of the controller, use the serial console port located on the front (see Figure 5). This port is an RJ-45 female connector that accepts an RS-232 serial cable with a male connector.

Figure 5 Serial Console Port Pin-Out



The communication settings for the console port are shown in the following table:

**Table 10:** Console Terminal Settings

Baud Rate	Data Bits	Parity	Stop Bits	Flow Control
9600	8	None	1	None



CAUTION: The Console port is compatible only with RS-232 devices. Non-RS-232 devices, such as APs, are not supported.

CAUTION: Do not connect the Console port to an Ethernet switch or a PoE power source. This may damage the controller.



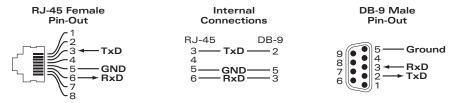
ATTENTION: Le port CONSOLE est compatible uniquement avec les périphériques RS-232. Les périphériques qui ne sont pas de type RS-232, notamment les points d'accès, ne sont pas pris en charge.

ATTENTION: Ne connectez pas le port Console sur un commutateur Ethernet ou une source d'alimentation PoE. Sinon, vous risquez d'endommager le contrôleur.

#### **Serial Console Port Adapter**

A modular adapter can be used to convert the female RJ-45 connector on the front (see Figure 5) to a male DB9 connector. See Figure 6 for details.

Figure 6 RJ-45 (Female) to DB9 (Male) Modular Adapter Conversion



#### Micro-USB Console Port

The W-7205 controller is equipped with one Micro-USB (type B) connector on the front (see Figure 4) that provides console access for direct local management. If both Micro-USB and RJ-45 Console ports are connected, the Micro-USB connection takes precedence over the RJ-45 Console connection.

#### **Micro-USB Driver**

To use the Micro-USB console port, install the Micro-USB driver on the system that will manage the controller. The driver is available for download on download.dell-pcw.com under Tools & Resources .

## **Management Port**

The W-7205 controller is equipped with a 10/100/1000BASE-T Gigabit Management (RJ-45) port on the front (see Figure 4). The management port provides 10/100/1000 Mbps Ethernet access to the controller CLI, SNMP, and Web interface for complete system management and troubleshooting. It can also be used to connect to a separate management network. The management port has a LINK/ACT LED on its top left and SPEED LED on its top right. During operation, these LEDs provide the status information as shown in the following table:

**Table 11**: 10/100/1000BASE-T (RJ-45) Management Port

LED	Function	Indicator	Status
LINK/ACT	Link Status	Green (Solid)	Link established
		Green (Blinking)	Link activity
		Off	No link on port
SPEED	Interface Speed	Green (Solid)	1000 Mbps
		Off	10/100 Mbps

#### Power, Status, and Peered LEDs

The front panel of the controller also includes Power, Status, and Peered LEDs (see Figure 4) that provide basic monitoring of the overall status of the controller. The following table describes the different behavior of these LEDs:

**Table 12:** Power, Status, and Peered LEDs

LED	Function	Indicator	Status
Power	System Power	Green (Solid)	Power On
		Off	Power Off
Status	System Status	Green (Solid)	Operational
		Green (Blinking)	Device is loading software
		Amber (Blinking)	Major alarm
		Amber (Solid)	Critical alarm
		Off	No power
Peered	Reserved for future use	NA	NA

#### **LCD Panel**

The W-7205 controller is equipped with an LCD panel that displays information about the controller's status, and provides a menu that allows basic operations, such as initial setup and reboot. The LCD panel displays two lines of text with a maximum of 16 characters per line. When using the LCD panel, the active line is indicated by an arrow next to the first letter. The LCD panel is operated using the two navigation buttons to the right of the screen. See Figure 4.

- Menu— Allows navigation through the menus of the LCD panel
- Enter— Confirms and executes the action currently displayed on the LCD panel

#### **LCD Menu**

The LCD menu includes four modes as shown in the following table:

Table 13: LCD Panel Mode

LCD Mode	Function	Displayed Status/ Command	Description
Boot	Displays boot status of the controller	Booting ArubaOS	Boot status of the controller.
LED	Displays the mode of the STATUS LED of ports. The LED mode menu allows to choose what information is communicated by the STATUS LEDs on each port. See Table 5 for descriptions of the LED behavior of each mode.	LED mode: ADM	Administrative— Displays whether the port is administratively enabled or disabled
		LED mode: DPX	Duplex– Displays the duplex mode of the port
		LED mode: SPD	Speed- Displays the speed of the port.

Table 13: LCD Panel Mode

LCD Mode	Function	Displayed Status/ Command	Description
		Exit	Exit LED menu
Status	Displays the ArubaOS version.	OS Version	ArubaOS version
		Exit	Exit Status menu
Maintenance	Allows execution of some basic operations such as uploading an image or rebooting the controller	Upgrade Image [Partition 0 [Y N]   Partition 1 [Y N]]	Upgrade the controller image on the selected partition from a predefined location on an attached USB flash device
		Upload config [Y N]	Upload the controller's current configuration to a predefined location on the attached USB flash device
		Factory Default [Y N]	Reset the controller to factory default settings
		Media Eject [Y N]	Complete reading or writing to the attached USB device
		Reload system [Y N]	Reload controller
		Halt system [Y N]	Halt controller
		Exit	Exit Maintenance menu

#### **Disabling the LCD Screen**

By default, the LCD screen is enabled. However, if the W-7205 controller is deployed in a location without physical security, the LCD screen can be disabled through the CLI. When disabled, pushing one of the navigation buttons will only illuminate the LCD screen and display the slot, role, device name, and any alarms.

Additionally, it is possible to disable only the maintenance menu. This allows to change the LED behavior and view the device status but prevent upgrades and configuration changes.

To disable the LCD screen, enter the Enable mode and use the following CLI commands:

```
(host) #configure terminal
(host) (config) #lcd-menu
(host) (lcd-menu) #disable menu
```

To disable only the Maintenance menu or one of its sub-menus, enter the Enable mode and use the following CLI commands:

```
(host) #configure terminal
(host) (config) #lcd
(host) (lcd-menu) #disable menu maintenance ?
  factory-default
  halt-system
  media-eject
  reload-system
  upgrade-image
  upload-config
(host) (lcd-menu) #disable menu maintenance upgrade-image ?
  partition0
  partition1
```

#### **CPU Module**

The W-7205 controller is equipped with a pre-installed CPU module on the back panel of the controller.



NOTE: Do not remove the CPU module unless directed by an authorized Dell technician. The CPU module is not hot-swappable.

For LED behavior on the CPU module, see Table 14.

**Table 14:** Power and Status LEDs on the CPU Module

LED	Function	Indicator	Status
Power	CPU Power	Green (Solid)	Module power On
		Off	Power Off
Status	CPU Status	Green (Solid)	Module operational
		Green (Blinking)	Device is loading software
		Off	No power

#### **Power Supply**

The W-7205 controller is equipped with an integrated AC power supply of 180W.

## **Grounding Point**

To meet safety and electromagnetic interference (EMI) requirements and to ensure proper operation, the controller must be adequately grounded before power is connected. Connect a grounding cable to earth ground and then attach it to the chassis grounding point using two screws.

Comply with electrical grounding standards during all phases of installation and operation of the product. Do not allow the controller's chassis, network ports, power supply, or mounting brackets to contact any device, cable, object, or person attached to a different electrical ground. Also, never connect the device to external storm grounding sources.



# **Chapter 2**

#### Installation

This chapter describes how to install a W-7205 controller using the different mounting options available. The W-7205 controller ships with an accessory kit that includes the equipment needed to mount the controller in a standard two-post 19-inch Telco rack.



CAUTION: Only use the included or Dell specified cables, power cords, AC power supplies, and batteries. The power cord should not be used with other electric equipment than what is specified by Dell.



ATTENTION: Utilisez uniquement les câbles, cordons d'alimentation, alimentations c.a. et batteries inclus ou les câbles, cordons d'alimentation, alimentations c.a. et batteries spécifiés par Dell. Le cordon d'alimentation ne doit pas être utilisé avec des équipements électriques autres que ceux spécifiés par Dell.



CAUTION:接続ケーブル、電源コード、AC アダプタ、バッテリーなどの部品は、必ず添付品または指定品をご使用ください。また、電源ケーブルは弊社が指定する製品以外の電気機器には使用できないためご注意ください。

#### **Precautions**

- Ensure that the rack is correctly and securely installed to prevent it from falling or becoming unstable.
- Dangerous voltage above 240VAC is always present while the Dell Power Supply Module is plugged into an
  electrical outlet. Remove all rings, jewelry, and other potentially conductive material before working with this
  device.
- Never insert foreign objects into the chassis, power supply, or any other component, even when the power supply
  is turned Off, unplugged, or removed.
- Ensure that the main power is fully disconnected from the controller by unplugging all power cords from their
  outlets. For safety, verify that the power outlets and plugs are easily reachable by the operator.
- Do not handle electrical cables which are not insulated. This also includes network cables.
- Keep water and other fluids away from the controller to minimize electrical hazards.
- Comply with electrical grounding standards during all phases of installation and operation of the product. Do not
  allow the controller's chassis, network ports, power supply, or mounting brackets to contact any device, cable,
  object, or person attached to a different electrical ground. Also, never connect the device to external storm
  grounding sources.
- Perform installation or removal of the chassis or any module in a static-free environment. Proper use of antistatic body straps and mats is strongly recommended.
- Modules must be kept in anti-static packaging when not installed in the chassis.
- Do not ship or store this product near strong electromagnetic, electrostatic, magnetic, or radioactive fields.
- Do not disassemble the chassis.

## **Selecting a Location**

The W-7205 controller, like other networking and computing devices, requires the following "electronic-friendly" environment:

- Reliable power
  - Verify that the electrical outlet is compatible with the W-7205 controller power supply.
- Cool, non-condensing ventilation
  - For proper operation, the W-7205 controller requires an environment with an ambient air temperature between 0° C and 40° C (32° F and 104° F). Humidity must be kept at non-condensing levels, between 10% and 90%.
  - Where a large number of electrical devices are working in the same area, additional air conditioning or air circulation equipment may be required.
- Ample space
  - For proper air circulation, leave at least 10 cm (4 inches) clearance all around the chassis.
  - Leave additional space in front and rear side of the chassis to access power cords, network cables, and indicator LEDs.
- Limited electromagnetic interference
  - For best operation, keep the W-7205 controller and all cords and cables at least 0.7 meters (2 feet) from fluorescent lighting fixtures, and 2 meters (6 feet) from photocopiers, radio transmitters, electric generators, and other sources of strong electromagnetic interference.

# **Rack Mounting - Standard/Front**

This mounting option allows mounting the W-7205 controller from the front in a standard two-post 19-inch Telco rack.



CAUTION: Each W-7205 controller must have its own mounting equipment. Do not place other networking equipment directly on top of a mounted W-7205 controller. Failure to do so can damage the controller.



ATTENTION: Chaque contrôleur W-7205 doit disposer de son propre équipement de montage. Veillez à ne placer aucun autre équipement réseau directement sur un contrôleur W-7205 installé. Dans le cas contraire, vous risqueriez d'endommager le périphérique.

## **Required Tools and Equipment**

The following tools and equipment are required for installing a W-7205 controller:

- Mounting brackets (x2); Do not use for table or shelf installation
- Screws for the mounting brackets (x8): M4 x 8 mm Phillips Flat Head Screws
- Screws for system rack mount (x4): M6 x 15 mm Phillips Pan Head Screws
- M6 cage nut (x4): Optional
- M6 clip nut (x4): Optional
- Suitable screwdrivers (not included in the package)



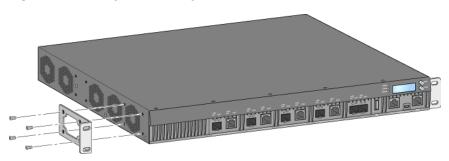
NOTE: Some racks require screws that differ from those included with the W-7205 controller. Ensure to have the correct screws before installing the controller.

#### **Installation Steps**

To install a W-7205 controller from the front in a standard two-post 19-inch Telco rack:

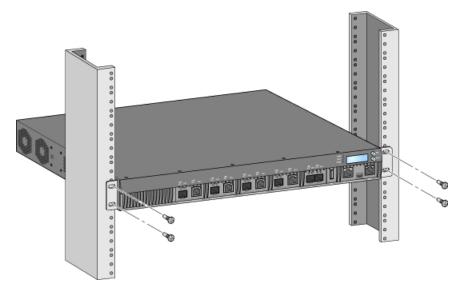
1. Place the mounting brackets over the mounting holes near the front on either sides of the controller (see Figure

Figure 7 Attaching the Mounting Brackets



- 2. Secure the brackets to the controller using the eight screws for the mounting bracket (four per bracket) and a suitable screwdriver.
- 3. If the rack requires cage nuts or clip nuts, insert them on the front rails (two per rail, aligned horizontally)
- 4. Mount the controller in the rack using the four screws for system rack mount (two per bracket) and a suitable screwdriver (see Figure 8).

Figure 8 Front-Rack Mount Installation





NOTE: Leave a minimum of 10 cm (4 inches) of space on the left and right side of the controller for proper air flow and ventilation. Leave additional space in the front and the back of the controller to access network cables, LED status indicators, and power cord.

## **Rack Mount Installation- Mid**

An optional accessory kit (SPR-WL2-MNT, must be purchased separately) is available that allows mounting the W-7205 controller from the middle in standard two-post 19-inch Telco rack.



CAUTION: Each W-7205 controller must have its own mounting equipment. Do not place other networking equipment directly on top of a mounted W-7205 controller. Failure to do so can damage the controller.



ATTENTION: Chaque contrôleur W-7205 doit disposer de son propre équipement de montage. Veillez à ne placer aucun autre équipement réseau directement sur un contrôleur W-7205 installé. Dans le cas contraire, vous risqueriez d'endommager le périphérique.

#### Required Tools and Equipment

The following tools and equipment are required for installing a W-7205 controller from the middle of the device:

- Mid-mount brackets (x2) (included in the mounting accessory kit)
- Screws for the mounting brackets (x8): M4 x 8 mm Phillips Flat Head Screws
- Screws for system rack mount (x4): M6 x 15 mm Phillips Pan Head Screws
- M6 cage nut (x4): Optional
- M6 clip nut (x4): Optional
- Suitable screwdrivers (not included in the package)



NOTE: Some racks require screws that differ from those included with the W-7205 controller. Ensure to have the correct screws before installing the W-7205 controller.

## **Installation Steps**

To install a W-7205 controller from the middle in a standard two-point 19-inch rack system:

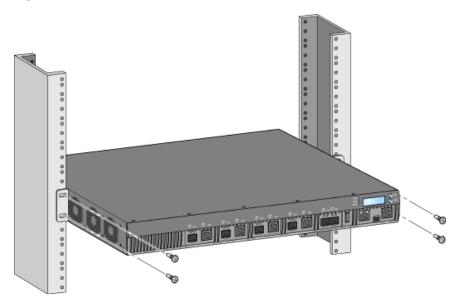
1. Place the mid-mount brackets over the mounting holes on either side of the controller in the middle (see Figure 9).

Figure 9 Attaching the Mid-Mount Brackets



- 2. Secure the brackets to the controller using the eight screws for mounting bracket (four per bracket) and a suitable screwdriver.
- 3. If the rack requires cage nuts or clip nuts, insert them on the front rails (two per rail, aligned horizontally)
- 4. Mount the controller in the rack using the four screws for system rack mount (two per bracket) and suitable screwdriver (see Figure 10).

Figure 10 Mid-Mount Rack Installation





NOTE: Leave a minimum of 10 cm (4 inches) of space on the left and right side of the controller for proper air flow and ventilation. Leave additional space in the front and the back of the controller to access network cables, LED status indicators, and power cord.

### **Table or Shelf Installation**

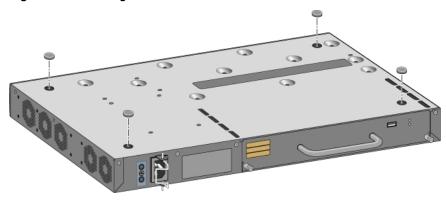
## **Required Tools and Equipment**

Rubber feet (included in the package)

## **Installation Steps**

- 1. Attach the rubber feet to the bottom of the controller (see Figure 11).
- 2. Place the controller on the desired flat table or shelf.

Figure 11 Attaching Rubber Feet



## **Wall Mounting**

An optional accessory kit (SPR-WL2-MNT, must be purchased separately) is available that allows you to mount the W-7205 controller to a wall.

## **Required Tools and Equipment**

The following tools and equipment are required for installing the W-7205 controller on a wall:

- Wall-mount brackets (x2) (included in the mounting accessory kit)
- Screws for the mounting bracket (x8): M4 x 8 mm Phillips Flat Head Screws
- Wall anchors: Optional (not included in the package)
- Wall-mount screws (not included in this package, the type of screw depends on the installation surface)
- Suitable screwdrivers (not included in the package)

## **Installation Steps**

To install a W-7205 controller on a wall:



NOTE: Ensure that the Ethernet ports are facing down when installing the W-7205 controller on a wall.

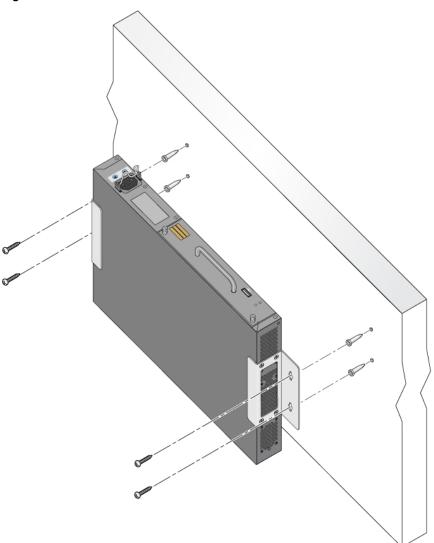
1. Fasten the wall-mount brackets over the mounting holes on the sides of the controller using the eight screws for the mounting brackets (four per bracket) and a suitable screwdriver (see Figure 12).

Figure 12 Attaching the Wall-Mount Brackets



- 2. After choosing a mounting location, mark the points on the wall for the mounting holes.
- 3. Drill the holes and insert wall anchors if the installation requires them.
- 4. Align the holes of the mounting bracket with the holes drilled in the wall (see Figure 13).
- 5. Use appropriate screws to secure the controller.

Figure 13 Wall-Mount Installation



## **Connecting and Disconnecting the AC Power Cord**

Once the controller is installed, it is ready to be powered on. The W-7205 controller is not equipped with an On/Off switch. The controller will power On when the AC power cord is connected to the AC power connector and an AC power outlet.

## **Connecting the AC Power Cord**

To connect the AC power cord to the W-7205 controller:

- 1. Lift the power cord retaining clip so that it is not blocking the AC power connector.
- 2. Insert the coupler end of the AC power cord into the AC power connector.
- 3. Lower the power cord retaining clip over the AC power cord.

The W-7205 controller should now be receiving power.

#### **Disconnecting the AC Power Cord**

To disconnect the AC power cord from the W-7205 controller:

- 1. Lift the power cord retaining clip off the AC power cord.
- 2. Pull the AC power cord from the AC connector.
- 3. The W-7205 controller is now turned Off.

# Installing an SFP/SFP+ Module

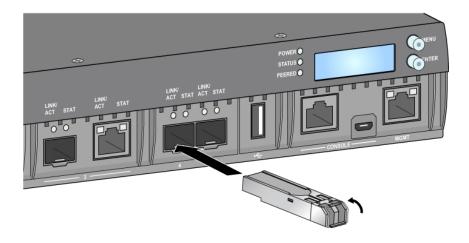


NOTE: Use standard ESD precautions when installing or removing an SFP/SFP+ module.

To install an SFP/SFP+ module into the W-7205 controller:

1. Slide the SFP/SFP+ module, top side facing upward, into a 10GBASE-X or 1000BASE-X ports on the controller until a connection is made and an audible click is heard (see Figure 14).

Figure 14 Installing an SFP Module

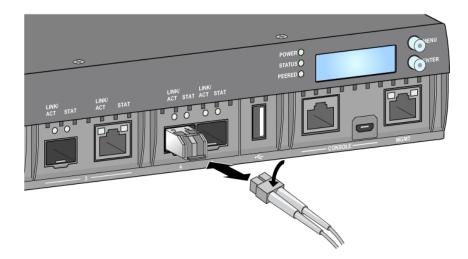


## **Connecting an LC Fiber Optic Cable**

To connect an LC fiber optic cable into an SFP-SX or SFP-LX module:

- 1. Clean the fiber optic cable connector before inserting it into the SFP/SFP+ module.
- 2. Insert the fiber optic cable into the SFP/SFP+ module. Ensure that the latch on the cable faces the top of the SFP/SFP+ module (see Figure 15).
- 3. Slide the cable into place until a connection is made and an audible click is heard.

Figure 15 Connecting an LC Fiber Optic Cable



## **Disconnecting an LC Fiber Optic Cable**

To disconnect an LC fiber optic cable from an SFP-SX or SFP-LX module:

1. Depress the transceiver handle to release the latch on the cable and simultaneously pull the cable out of the port.

# Removing an SFP/SFP+ Module

To remove an SFP/SFP+ module:

- 1. Open and release the latch on the SFP/SFP+ module.
- 2. Pull and remove the module from the port.



# **Chapter 3**

## **Specifications, Safety, and Compliance**

## W-7205 Specifications

#### **Physical**

- Device Dimensions (without mounting brackets) (HxWxD): 1.72" x 17.40" x 13.15" (4.37 cm x 44.2 cm x 33.40
- Device Weight: 10.912 lbs (4.95 kgs)

#### **Power Supply Specifications**

- 180 W AC Power Supply
  - AC Input Voltage: 100 VAC to 240 VAC
  - AC Input Current: 2.2 A
  - AC Input Frequency: 50 to 60 Hz

#### **Operating Specifications**

- Operating Temperature Range: 0 °C to 40 °C (32 °F to 104 °F)
- Operating Humidity Range: 10% to 90% (RH), non-condensing

## **Storage Specifications**

- Storage Temperature Range: 0 °C to 50 °C (32 °F to 122 °F)
- Storage Humidity Range: 10% to 95% (RH), non-condensing

## Safety and Regulatory Compliance



NOTE: For country specific restrictions and additional safety and regulatory information, refer to the multi-language Dell Networking W-Series Safety, Environmental, and Regulatory Information document included with this product.



CAUTION: The Dell controllers must be installed by a professional installer. The professional installer is responsible for ensuring that grounding is available and it meets applicable local and national electrical codes.



ATTENTION: Les contrôleurs Dell doivent être installés par un installateur professionnel. Cet installateur doit s'assurer que ces appareils sont correctement mis à la terre et que le circuit de mise à la terre est conforme aux codes électriques locaux et nationaux en vigueur.





CAUTION: Use of controls or adjustments of performance or procedures other than those specified in this manual may result in hazardous radiation exposure.



ATTENTION: L'utilisation de commandes ou de réglages de performances ou de procédures qui ne sont pas spécifiées dans ce manuel risque d'entraîner une exposition à des rayonnements dangereux.

This product complies with 21 CFR Chapter 1, Subchapter J, Part 1040.10, and IEC 60825-1: 1993, A1: 1997, A2: 2001, IEC 60825-2: 2004+A1.

For continued compliance with the above laser safety standards, only approved Class 1 modules from our approved vendors should be installed in the product.



CAUTION: Although this controller has been tested up to 1 kV per CE immunity requirements, this product requires surge protection to be provided as part of the building installation to protect against unidirectional surges resulting from electrical switching and lightning strikes. For protection against these surges in an outdoor installation, any exposed wiring must be shielded, and the shield for the wiring must be grounded at both ends.



ATTENTION: Le contrôleur a été testé jusqu'à 1 000 V conformément aux exigences en matière d'immunité de la Communauté européenne. Cependant, il est essentiel de prévoir une protection contre les surtensions dans l'installation électrique du bâtiment afin de protéger l'appareil contre les surtensions unidirectionnelles provenant du circuit électrique ou de la foudre. Pour se protéger contre ces surtensions dans une installation extérieure, tous les câbles exposés doivent être blindés et le blindage doit être mis à la terre aux deux extrémités.

#### **Regulatory Model Name**

The regulatory model name for the W-7205 controller is ARCN7205.

# **Electromagnetic Interference**

#### **United States**

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

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

This product 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.

#### Canada

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

Cet appareil numérique respecte les limites de 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 des Communications.

#### Europe



CAUTION: This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.



ATTENTION: Produit de classe A. Dans un environnement domestique, ce produit peut provoquer des interférences radio, auquel cas l'utilisateur doit prendre un certain nombre de mesures.

This product complies with EN55022 Class A and EN55024 standards.

## Japan VCCI

この装置は、 95XA 情報技術装置です。この装置を家庭環境で使用すると 電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を 講ずるよう要求されることがあります。

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take corrective actions.

#### Taiwan (BSMI)

## 警告使用者:

這是甲類的資訊產品,在居住的環境中使用 時,可能會造成射頻干擾,在這種情況下, 使用者會被要求採取某些適當的對策。

#### South Korea

이 기기는 업무용(A급) 전자파 적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

## **EU Regulatory Conformance**

This product is CE marked according to the provisions of the EMC Directive (2004/108/EC) - CE. Dell, hereby declares that W-7205 controller device models are in compliance with the essential requirements and other relevant provisions of Directive (2004/108/EC) – CE. The Declaration of Conformity made under Directive 1999/5/EC is available for viewing on dell.com.

## **Battery Statements**



CAUTION: The battery supplied with this product may contain perchlorate material. Special handling may apply in California and other certain states. See www.dtsc.ca.gov/hazardouswaste/perchlorate for more information.



ATTENTION: La batterie fournie avec ce produit peut contenir du perchlorate. Des précautions de manipulation peuvent s'appliquer dans l'État de Californie et dans d'autres états/pays. Consultez la page www.dtsc.ca.gov/hazardouswaste/perchlorate pour plus d'informations.



WARNING: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.



WARNING: Risque d'explosion si la batterie est remplacée par une batterie de type incorrect. Mettez les batteries au rebut conformément aux instructions.

# **Proper Disposal of Dell Equipment**

#### Waste of Electrical and Electronic Equipment



Dell products at end of life are subject to separate collection and treatment in the EU Member States, Norway, and Switzerland and therefore are marked with the symbol shown at the left (crossedout wheelie bin). The treatment applied at end of life of these products in these countries shall comply with the applicable national laws of countries implementing Directive 2012/19/EU on Waste of Electrical and Electronic Equipment (WEEE).

#### China RoHS



Dell products also comply with China environmental declaration requirements and are labeled with the "EFUP 50" label shown at the left.

有毒有害物质声明 Hazardous Materials Declaration

	有毒有害物质或元素 (Hazardous Substances)					
部件名称 (Parts)	铅 Lead (Pb)	录 Mercury (Hg)	Cadmium (Cd)	大价格 Chromium VI Compounds (Cr <sup>s</sup> *)	多溴联苯 Polybrominated Biphenyls (PBB)	多溴二苯醚 Polybrominated Diphenyl Ether (PBDE)
电路板 PCA Board	х	0	0	0	0	0
机械组件 Mechanical Subassembly	х	0	0	0	0	0
电源适配器 Power Adaptor	х	0	0	0	0	0

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/T11363-2006标准规定的限量要求以 This component does not contain this hazardous substance above the maximum concentration values in homogeneous materials

symbol shown here. The Environment- Friendly Use Period is valid only when the product is operated under the conditions defined in the product manual



Part Number: 0510304-01

## European Union RoHS

Po-HS Dell products also comply with the EU Restriction of Hazardous Substances Directive 2011/65/EU (RoHS). EU RoHS restricts the use of specific hazardous materials in the manufacture of electrical and electronic equipment. Specifically, restricted materials under the RoHS Directive are Lead (including Solder used in printed circuit assemblies), Cadmium, Mercury, Hexavalent Chromium, and Bromine. Some Dell products are subject to the exemptions listed in RoHS Directive Annex 7 (Lead in solder used in printed circuit assemblies). Products and

specified in the SJ/T11363-2006 Industry Standard. 表示读有毒有害物質型が使識部件的製工學與材料中的含量相出SJ/T11363-2006候権規定的限量要求。 This component does contain this hazardous substance above the maximum concentration values in homogeneous materials specified in the SJ/T11363-2006 Industry Standard.

packaging will be marked with the "RoHS" label shown at the left indicating conformance to this Directive.

### **India RoHS**

This product complies with RoHS requirements as prescribed by E-Waste (Management & Handling) Rules, governed by the Ministry of Environment & Forests, Government of India.

