VEP1400, E42W

Setup Guide



Notes, cautions, and warnings

- () NOTE: A NOTE indicates important information that helps you make better use of your product.
- △ CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.
- Marning: A WARNING indicates a potential for property damage, personal injury, or death.

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About this guide

This guide provides site preparation recommendations, step-by-step procedures for rack mounting and desk mounting, inserting modules, and connecting to a power source.

- △ CAUTION: To avoid electrostatic discharge (ESD) damage, wear grounding wrist straps when handling this equipment.
- MARNING: Only trained and qualified personnel can install this equipment. Read this guide before you install and power up this equipment. This equipment contains two power cords. Disconnect both power cords before servicing.
- MARNING: This equipment contains optical transceivers, which comply with the limits of Class 1 laser radiation.



Figure 1. Class 1 laser product tag

Marning: When no cable is connected, visible and invisible laser radiation may be emitted from the aperture of the optical transceiver ports. Avoid exposure to laser radiation, and do not stare into open apertures.

Topics:

- Related documents
- Information symbols

Related documents

For more information about the Virtual Edge Platform 1400 (VEP1400), see the following documents:

- VEP1400 Installation Guide
- VEP1400 Release Notes
- (i) NOTE: For the most recent documentation, see the support site: www.dell.com/support.

Information symbols

This book uses the following information symbols:

- (i) NOTE: The Note icon signals important operational information.
- CAUTION: The Caution icon signals information about situations that could result in equipment damage or loss of data.
- WARNING: The Warning icon signals information about hardware handling that could result in injury.
- WARNING: The ESD Warning icon requires that you take electrostatic precautions when handling the device.

Site preparations

VEP1400 is universal customer premise equipment (uCPE). To connect the service provider edge or small to medium branch locations to the cloud, use VEP1400 to host virtual network functions.

For more information on VEP1400 specifications, see Chassis physical design.

() NOTE: Install the platform into a rack or cabinet before installing any optional components.

Topics:

- Site selection
- Chassis mounting
- System ground
- Fans and airflow
- Power
- Storing components

Site selection

Ensure that the area where you install your platform meets the following safety requirements:

- · Near an adequate power source
- Environmental—platform location—continuous temperature range is from 0°C to 45°C (32–113°F)
- Operating humidity:
 - 5% to 85% (RH), noncondensing continuously
 - 5% to 90% (RH), noncondensing Short term (< 1% of operational hour per year)
- · In a dry, clean, well-ventilated, and temperature-controlled room, away from heat sources such as hot air vents or direct sunlight
- · Away from sources of severe electromagnetic noise

For more information about platform storage and environmental temperatures, see Specifications.

Chassis mounting

The VEP1400 supports desktop placement (rubber feet), wall mount (using brackets) and rack-mount using a dual-unit tray.

System ground

Dell recommends grounding your system. Use VEP4600 in a CBN.

Fans and airflow

Fan installation is done as part of the factory install based on stock keeping unit (SKU) type. VEP 4600 supports an AC normal fan unit with fan airflow from the I/O to the PSU.

For proper ventilation, position the platform in an equipment rack or cabinet with a minimum of 5 inches (12.7 cm) of clearance around the exhaust vents. The fan speed varies based on internal temperature monitoring. The platform never intentionally turns off the fans.

Power

Connect the platform to the applicable power source using the appropriate power cable. The VEP1400 ships with one external AC/DC power supply and one AC power cable.

When installing AC platforms, follow the requirements of the National Electrical Code ANSI/NFPA 70, where applicable.

ATTENTION REVIEWERS:

Verify that this comment is correct.

The platform is powered-up when the power cable is connected between the platform and the power source.

- CAUTION: Always disconnect the power cable before you service the power supply slots. The platform has multiple power cables. Before servicing, ensure that all power cables are disconnected.
- CAUTION: Use the power supply cable as the main disconnect device. Ensure that the socket-outlet is located/installed near the equipment and is easily accessible.

Storing components

If you do not install the VEP1400 and components immediately, properly store the platform and all optional components following these guidelines:

- Storage location temperature must remain constant. The storage range is from -40°C to 70°C (-40°F to 158°F).
- · Store on a dry surface or floor, away from direct sunlight, heat, and air conditioning ducts.
- Store in a dust-free environment.
- NOTE: ESD damage can occur when components are mishandled. Always wear an ESD-preventive wrist or heel ground strap when handling the platform and its accessories. After you remove the original packaging, place the VEP1400 and its components on an antistatic surface.

VEP1400 installation

To install VEP1400, complete the installation procedures in the order presented in this section.

Always handle the platform and its components with care. Avoid dropping the platform or any field replaceable units (FRUs).

() NOTE: ESD damage can occur if components are mishandled. Always wear an ESD-preventive wrist or heel ground strap when handling the platform and its components. As with all electrical devices of this type, take all the necessary safety precautions to prevent injury when installing this platform.

Topics:

- Unpack
- Platform power-up

Unpack

() NOTE: Before unpacking the platform, inspect the container and immediately report any evidence of damage.

When unpacking VEP1400, ensure that the following items are included:

- · One VEP1400
- · Mini-USB console cable
- One AC/DC power supply and AC power cable
- · Wall mount hardware
- · VEP1400 Setup Guide
- Safety and Regulatory Information
- · Warranty and Support Information
- 1 Place the container on a clean, flat surface.
- 2 Open the container.
- 3 Carefully remove the unit from the container and place it on a secure and clean surface.
- 4 Remove all packing material.
- 5 Inspect the product and accessories for damage.

Platform power-up

Supply power to the VEP1400 after you mount it in a rack or desktop.

Reinspect your platform before power-up. Verify the following:

- The ambient temperature around the unit, which may be higher than the room temperature, be within the limits that are specified for the VEP1400, see Specifications.
- · There is sufficient airflow around the unit.
- · The input circuits are correctly sized for the loads and that you use sufficient overcurrent protection devices.
- · All protective covers are in place.

△ CAUTION: If a fan module is not installed, do not power up the platform.

- () NOTE: A US AC power cable is included for powering up an AC power supply. You must order all other power cables separately.
- (i) NOTE: If the components are mishandled, ESD damage can occur. Always wear an ESD-preventive wrist or heel ground strap when handling the platform and its components.

Power up sequence

For configurations that include a fan module, the fans immediately come on at high speed when the platform powers up. The fan speed slows as the platform continues to boot up.

Specifications

4

This section lists the VEP4600 specifications.

- △ CAUTION: Operate the product at an ambient temperature not higher than 0°C to 40°C (32°F to 104°F).
- CAUTION: Lithium Battery Caution: There is a danger of explosion if the battery is incorrectly replaced. Replace only with same or equivalent type of battery. Dispose of the batteries according to the manufacturer's instructions.
- (i) NOTE: For RoHS information, see Restricted Material Compliance.

Chassis physical design

Table 1. Chassis physical design

Parameter	Specifications
Height	2.0 inches (50.8 mm)
Width	8.1 inches (205.74 mm)
Depth	7.9 inches (200.66 mm)
Chassis weight with factory-installed components ATTENTION REVIEWERS: Need verification on the chassis weight as it is not included in the Source book yet.	 TBD (no fan) TBD (1 fan) TBD (2 fans)

Table 2. Environmental parameters

Parameter	Specifications
Operating temperature	0–40°C (32°F–104°F) continuously
Operating humidity	 5% to 85% (RH), noncondensing continuously 5% to 90% (RH), noncondensing short-term (< 1% of operational hour per year)
Storage temperature	–40° to 70°C (–40° to 158°F)
Storage humidity	5% to 90% (RH), noncondensing
Maximum thermal output ATTENTION REVIEWERS: Need verification on the max thermal output as it is not included in the Source book yet.	TBD
Maximum operational altitude	No performance degradation to16,404ft (5,000 meters)
Maximum nonoperational altitude	35,000 ft (10,668 meters)

Table 3. AC power requirements

Parameter	Specifications
Power supply	100–240 VAC 50/60 Hz
Maximum current draw per system - AC	 100 VAC: 2.0A 240 VAC: 1.0A
Maximum power consumption	Typical:
	 200 W (8-core, POE+) 70 W (16 core) 60 W (8 core) 27 W (4 core) 25 W (2 core)
	Maximum:
	 260 W (8-core, POE+) 110 W (16 core) 94 W (8 core) 55 W (4 core) 50 W (2 core)
Typical power consumption ATTENTION REVIEWERS: Need verification on the total power consumption as it is not included in the Source book yet.	TBD

Support

The support site provides documents and tools to help you effectively use your equipment and mitigate network outages. Through the support site you can obtain technical information, access software upgrades and patches, download available management software, and manage your open cases. The support site provides integrated, secure access to these services.

To access the support site, go to www.dell.com/support/. To display information in your language, scroll down to the bottom of the web page and select your country from the drop-down menu.

• To obtain product-specific information, enter the 7-character service tag, known as a luggage tag, or 11-digit express service code of your platform and click **Submit**.

To view the chassis service tag or express service code, pull out the tag on the upper-right side of the platform.

• To receive more technical support, click Contact Us. On the Contact Information web page, click Technical Support.

To access platform documentation, go to www.dell.com/manuals/.

To search for drivers and downloads, go to www.dell.com/drivers/.

To participate in community blogs and forums, go to www.dell.com/community.