

Dell DL1000 Appliance Getting Started Guide

Regulatory Model: E10S Series
Regulatory Type: E10S003



Notes, Cautions, and Warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your computer.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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Installation And Configuration

 **WARNING:** Before performing the following procedure, review the safety instructions that came with the system.

Unpacking A Rack System

Unpack your system and identify each item.

Installing The Rails And System In A Rack

Assemble the rails and install the system in the rack following the safety instructions and the rack installation instructions provided with your system.

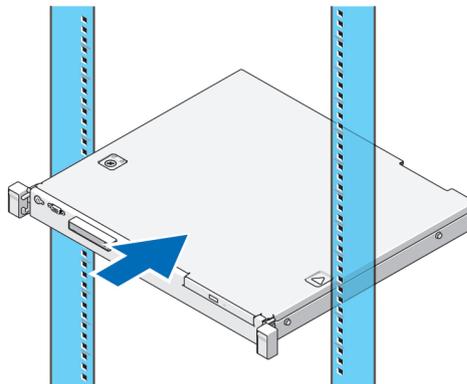


Figure 1. Installing the Rails and System in a Rack

Using The System Without A Rack

You can use the system without the server rack. When you are using the system without a rack, ensure that you follow these guidelines:

- The system must be placed on a solid, stable surface that supports the entire system.
 -  **NOTE:** The system must not be placed vertically.
- Do not place the system on the floor.
- Do not place anything on top of the system. The top panel may deflect under the weight and cause damage to the system.
- Ensure adequate space around the system for proper ventilation.
- Ensure that the system is installed under the recommended temperature conditions as stated in the Technical Specification – Environmental Section of this document.

 **CAUTION:** Failure to follow these guidelines may result in damage to the system or physical injury.

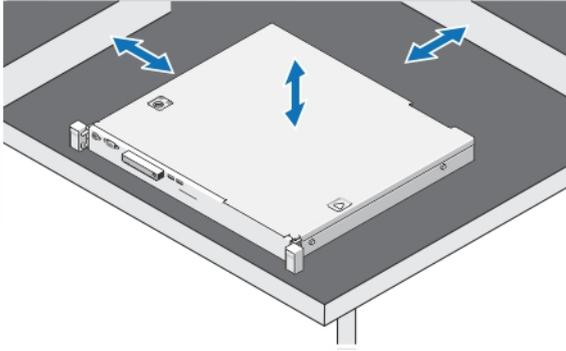


Figure 2. Using the System Without a Rack

Connecting The Keyboard, Mouse, And Monitor (Optional)

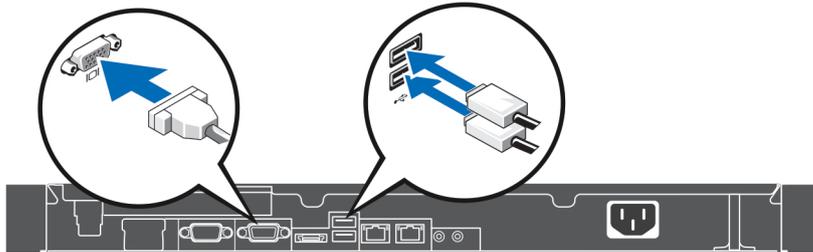


Figure 3. Connecting Keyboard, Mouse, and Monitor (Optional)

Connect the keyboard, mouse, and monitor (optional).

The connectors on the back of your system have icons indicating the type of cable to be plugged into each connector. Be sure to tighten the screws (if any) on the monitor's cable connector.

Connecting The Power Cable

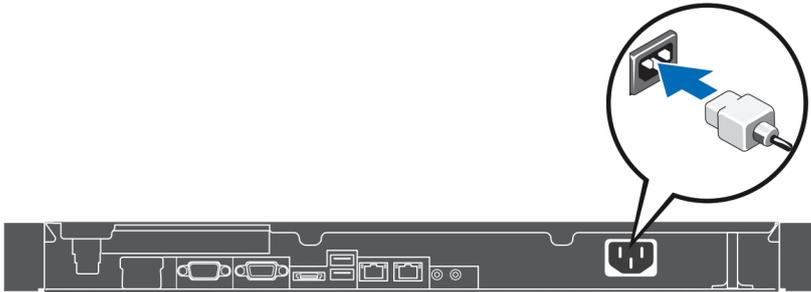


Figure 4. Connecting the Power Cable

Connect the system's power cable to the system and, if a monitor is used, connect the monitor's power cable to the monitor.

Securing The Power Cable

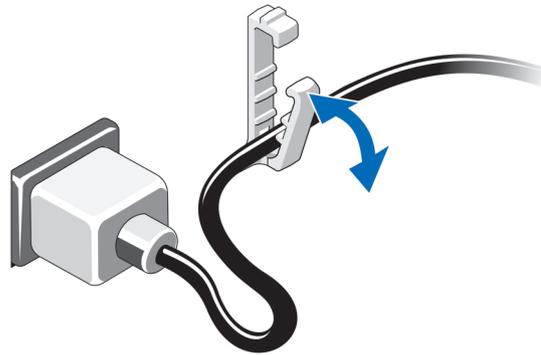


Figure 5. Securing the Power Cable

Bend the system power cable and secure the cable in the retention clip.

Plug the other end of the power cable into a grounded electrical outlet or a separate power source such as an uninterruptible power supply (UPS) or a power distribution unit (PDU).

Turning On The System

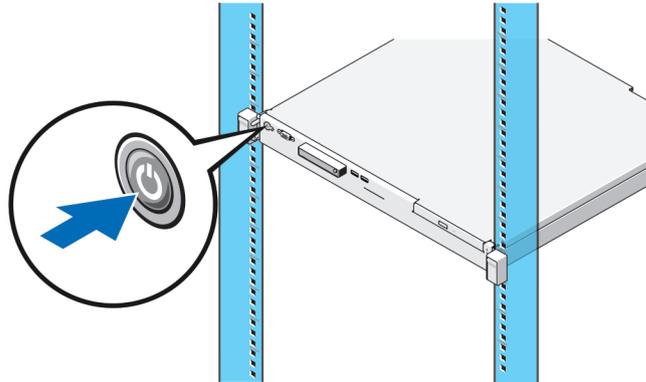


Figure 6. Turning on the System

Press the power button on the system. The power indicator should light.

Installing The Optional Bezel

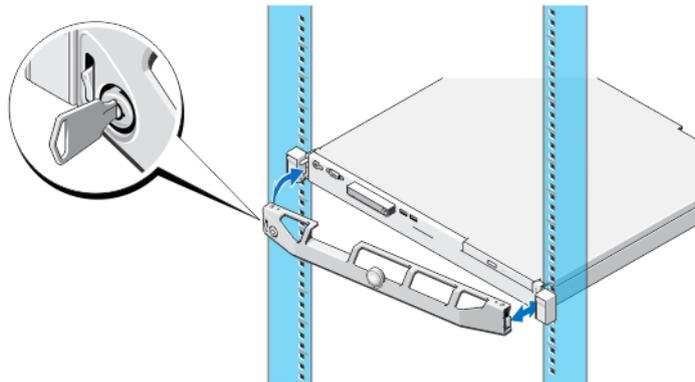


Figure 7. Installing the Optional Bezel

Install the bezel (optional).

Complete The System Setup

Your system comes with the operating system preinstalled. To reinstall an operating system, see the installation and configuration documentation for the operating system. Be sure the operating system is installed before installing hardware or software not purchased with the system.

Dell Software License Agreement

Before using your system, read the Dell Software License Agreement that came with your system. You must consider any media of Dell-installed software as BACKUP copies of the software installed on your

system's hard drive. If you do not accept the terms of the agreement, call the customer assistance telephone number. For customers in the United States, call 800-WWW-DELL (800-999-3355). For customers outside the United States, see dell.com/support and select your country or region from the top left of the page.

Other Information You May Need

 **WARNING:** See the safety and regulatory information that shipped with your system. Warranty information may be included within this document or as a separate document.

- The *Owner's Manual* provides information about system hardware features and describes how to troubleshoot the system and install or replace system components. This document is available online at dell.com/support/manuals.
- The *Release Notes* provides information about issues related to hardware and software and late-breaking user information that did not get into any other parts of the documentation set. This document is available online at dell.com/support/manuals.
- The *User's Guide* provides information about using your system. This document is available online at dell.com/support/manuals.
- The *Deployment Guide* provides information about cabling your system and the installation and initial configuration of the software. This document is available online at dell.com/support/manuals.
- The rack documentation included with your rack solution describes how to install your system into a rack, if required.
- Any media that ships with your system that provides documentation and tools for configuring and managing your system, including those pertaining to the operating system, system management software, system updates, and system components that you purchased with your system.

 **NOTE:** Always check for updates on dell.com/support/manuals and read the updates first because they often supersede information in other documents.

 **NOTE:** When upgrading your system, it is recommended that you download and install the systems management firmware on your system from dell.com/support.

Obtaining Technical Assistance

If you do not understand a procedure in this guide or if the system does not perform as expected, see your system Owner's Manual. Dell offers comprehensive hardware training and certification. See support.software.dell.com for more information. This service may not be offered in all locations.

Technical Specifications

 **NOTE:** The following specifications are only those required by law to ship with your system. For a complete and current listing of the specifications for your system, go to dell.com/support.

Power

AC Power Supply

Wattage	250 W
Heat dissipation	1040 BTU/hr maximum

Power

 **NOTE:** Heat dissipation is calculated using the power supply wattage rating.

Voltage	100–240 V AC, autoranging, 50/60 Hz, 4.0 A–2.0 A
Maximum inrush current	55 A
Battery	
Coin-cell battery	3.0 V CR2032 Lithium coin cell

Physical

Height	4.24 cm (1.67 inch)
Width	43.4 cm (17.09 inch)
Depth	39.37 cm (15.5 inch)
Maximum configuration weight	7.7 kg (16.97 lb)
Empty weight	4.55 kg (10.03 lb)

Environmental

 **NOTE:** For additional information about environmental measurements for specific system configurations, see dell.com/environmental_datasheets.

Temperature

Operating 10 °C to 35 °C (50 °F to 95 °F) with a maximum temperature gradation of 10 °C per hour.

 **NOTE:** For altitudes above 950 m (3,117 ft), the maximum operating temperature is derated 1°C/300 m (1 °F/547 ft).

Storage –40 °C to 65 °C (–40 °F to 149 °F) with a maximum temperature gradation of 20 °C per hour.

Relative Humidity

Operating 10% to 80% Relative Humidity (RH) with 29°C (84.2°F) maximum dew point.

Storage 5% to 95%RH with 33°C (91°F) maximum dew point. Atmosphere must be non-condensing at all times.

Maximum Vibration

Operating 0.26 G_{rms} at 5 Hz to 350 Hz for 15 minutes (all operation orientations).

Non-operating 1.88 G_{rms} at 10 Hz to 500 Hz for 15 minutes (all six sides tested).

Maximum Shock

Environmental

Operating	One shock pulse (one pulse each side of the system) of 31 G for 2.6 ms in the operational orientation.
Non-operating	Six consecutively executed shock pulses in the positive and negative x, y, and z axes (one pulse on each side of the system) of 71 G for up to 2 ms. Six consecutively executed shock pulses in the positive and negative x, y, and z axes (one pulse on each side of the system) of 32 G faired square wave pulse with velocity change at 270 inches/second (686 centimeters/second).

Altitude

Operating	-16 m to 3048 m (10,000 ft).  NOTE: For altitudes above 950 m (3,117 ft), the maximum operating temperature is derated 1°C/300 m (1 °F/547 ft).
Storage	-15.2 m to 12,000 m (-50 ft to 39,370 ft)

Airborne Contaminant Level

Class	G1 as defined by ISA-S71.04-1985
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Particulate Contamination

 **NOTE:** This section defines the limits to help avoid IT equipment damage and/or failure from particulates and gaseous contamination. If it is determined that levels of particulates or gaseous pollution are beyond the limits specified below and are the reason for the damage and/or failures to your equipment, it may be necessary for you to re-mediate the environmental conditions that are causing the damage and/or failures. Re-mediation of environmental conditions will be the responsibility of the customer.

Air Filtration

 **NOTE:** Applies to data center environments only. Air filtration requirements do not apply to IT equipment designed to be used outside a data center, in environments such as an office or factory floor.

Data center air filtration as defined by ISO Class 8 per ISO 14644-1 with a 95% upper confidence limit.

 **NOTE:** Air entering the data center must have MERV11 or MERV13 filtration.

Conductive Dust Air must be free of conductive dust, zinc whiskers, or other conductive particles.

 **NOTE:** Applies to data center and non-data center environments.

Corrosive Dust

- Air must be free of corrosive dust.
- Residual dust present in the air must have a deliquescent point less than 60% relative humidity.

Environmental

 **NOTE:** Applies to data center and non-data center environments.

Gaseous Contamination

 **NOTE:** Maximum corrosive contaminant levels measured at $\leq 50\%$ relative humidity.

Copper Coupon Corrosion Rate <math>< 300 \text{ \AA}/\text{month}</math> per Class G1 as defined by ANSI/ISA71.04-1985.

Silver Coupon Corrosion Rate <math>< 200 \text{ \AA}/\text{month}</math> as defined by AHSRAE TC9.9.