X6800 Server Quick Start Guide

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1 Overview

The Huawei X6800 server (X6800 for short) is a new-generation high-density server designed for Internet, high-performance computing (HPC), cloud computing, and data center applications. It is built on an architecture optimized for software-defined storage, big data, and software-defined infrastructure (SDI), ideal for large-scale server deployment.

The X6800 is a multi-node server that is 4U high, features high density, reliability, scalability, and energy efficiency, and is easy to manage and maintain.

The following table lists the technical specifications for the X6800. For details, see the *X6800 Server V100R003 User Guide* and *X6800 Server V100R005 User Guide*.

Category	Item	Specifications
Main components	Chassis	The chassis is 4U high. It provides eight server node slots at the front, and provides four PSU slots, five fan module slots, two management module slots, and eight standard PCIe slots at the rear.
	Server node	The X6800 can be flexibly configured with server nodes of different width and types. You can choose server nodes that best suit your service requirements.
	I/O modules	The X6800 provides a maximum of eight standard PCIe x8 slots for eight half-height half-length PCIe cards to provide more external ports or high-performance storage space for server nodes.
	PSUs	Four AC and DC (or HV DC) PSUs are configured. You can choose the PSU power based on server node configuration.
	Management modules	Management modules support convergence management and hot swap.
	Fan modules	Five hot-swappable fan modules are configured in N+1 redundancy mode.
Mechanical specifications	Dimensions (H x W x D)	175 mm x 447 mm x 898 mm (6.89 in. x 17.60 in. x 35.35 in.)
	Color	- Front panel: black - Shell: silver
	Weight	- Empty chassis: 17.5 kg (38.59 lb) - Chassis fully configured with XH628 V5 server nodes: 86 kg (189.6 lb) - Chassis fully configured with XH628 V3 server nodes: 109 kg (240.35 lb) - Chassis fully configured with XH622 V3 server nodes: 69 kg (152.15 lb) - Chassis fully configured with XH620 V3 server nodes: 77 kg (169.76 lb)

Category	Item	Specifications
		Packing materials: 6.5 kg (14.33 lb)
Environmental specifications	Temperature	- Operating temperature: 5°C to 40°C (41°F to 104°F) - Storage temperature: –40°C to +65°C (–40°F to +149°F)
	Humidity	- Operating humidity: 10% RH to 85% RH (non-condensing) - Storage humidity: 5% RH to 95% RH (non-condensing)
	Altitude	- Operating altitude: ≤ 3000 m (9842.4 ft) - Storage altitude: ≤ 12,000 m (39369.6 ft) **NOTE** - When the X6800 is used at an altitude of higher than 900 m (2952.72 ft), the operating temperature decreases by 1°C (1.8°F) as the altitude increases by 300 m (984.24 ft). - At an altitude of over 3000 m (9842.4 ft), only Titanium PSUs can be used. - HDDs are not supported at an altitude of over 3000 m (9842.4 ft).
Power supply specifications	Input voltage range	- AC PSUs: 100 V to 240 V AC, 50 Hz or 60 Hz - DC PSUs: –36 V to –75 V DC - HV DC PSUs: 192 V to 288 V DC 260 V to 400 V DC
	Maximum input current per PSU	- AC PSUs: 8.3 A - DC PSUs: 26 A - HV DC PSUs: 240 V DC PSUs: 5 A 380 V DC PSUs: 8 A
	PSU power rating	- AC PSUs and 240 V HV DC PSUs: 750 W - AC PSUs and 240 V or 380 V HV DC PSUs: 1200 W - DC PSUs: 800 W

2 Obtaining Tools

ESD wrist strap or ESD gloves: used to prevent ESD damage.

3 Unpacking and Checking the X6800

Open the packing case, and check the chassis and its components against the packing list, and ensure that they are complete and in good condition.

## 4 Installing the X6800

⚠ CAUTION

- Do not forcibly insert the X6800 into the chassis. Otherwise, the X6800 may be damaged. Remove the X6800 gently, and insert it by following the instructions.
- To avoid device damage or personal injury, hold the bottom of a server node with both hands when removing it.

1. Before operating the X6800, wear ESD clothes and gloves, and remove conductive objects such as jewelry and watches.

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2. Slide the chassis into the rack along the guide rails. Align the captive screws on the mounting ears on both sides of the chassis with the floating nuts on the mounting bars of the rack. See step (1) in the following figure.
3. Tighten the captive screws on the mounting ears using a Phillips screwdriver to secure the chassis to the rack. See step (2) in the following figure.
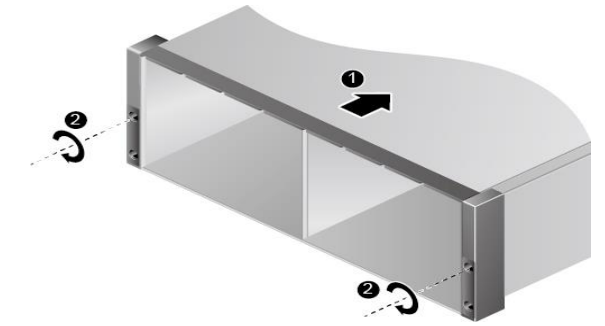
4. Press the latch on a server node and raise the ejector lever. See steps (1) and (2) in the following figure.
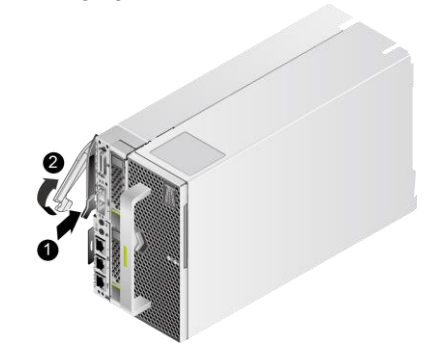
5. Insert the server node into the chassis horizontally until the server node cannot move forward, and lower the ejector lever. See steps (1) and (2) in the following figure.
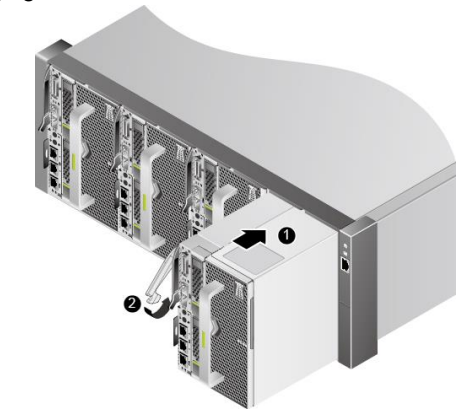
5 Powering On the X6800

1. Connect power cables.
2. Switch on the AC power distribution box (PDB) that maps to the chassis.
3. Switch on the busbar of the rack.

The chassis is properly powered on successfully if the PSU indicator is steady green.

6 Follow-up Procedure

After installing the X6800 properly in the rack and powering the X6800 on, configure the server and perform other tasks. For details, see the *X6800 Server V100R003 User Guide* or *X6800 Server V100R005 User Guide*.

You can obtain more information from the following:

- Product documentation DVD-ROM shipped with the cabinet
- Huawei support websites:
  - For enterprises, visit http://e.huawei.com
  - For carriers, visit http://carrier.huawei.com