Power and cabling requirements

FlexPod

NetApp
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A FlexPod design has minimum requirements for power and cabling.

Power requirements

Power requirements for FlexPod Datacenter differ based on the location where the FlexPod Datacenter configuration is installed.

For more data about the maximum power that is required and for other detailed power information, consult the technical specifications for each hardware component listed in the section Technical Specifications and References: Hardware Components.

For detailed Cisco UCS power data, see the Cisco UCS power calculator.

For NetApp storage controller power data, see the NetApp Hardware Universe. Under Platforms, select the storage platform that you want to use in the configuration (FAS/V-Series or AFF). Select the ONTAP version and storage controller, and then click the Show Results button.

Minimum cable requirements

The number and type of cables and adapters that are required vary per FlexPod Datacenter deployment. The cable type, transceiver type, and number are determined during the design process based on your requirements. The table below lists the minimum number of cables required.

Hardware	Model number	Cables required
Cisco UCS chassis	Cisco UCS 5108	At least two twinaxial cables per Cisco UCS 2104XP, 2204XP, or 2208XP module

Hardware	Model number	Cables required
Cisco UCS Fabric Interconnects	Cisco UCS 6248UP	• Two Cat5e cables for management ports • Two Cat5e cables for the L1, L2 interconnects, per pair of fabric interconnects • At least four twinaxial cables per fabric interconnect • At least four FC cables per fabric interconnect
	Cisco UCS 6296UP	
	Cisco UCS 6332-16UP	
	Cisco UCS 6454	
	Cisco UCS 6332	• Two Cat5e cables for management ports • Two Cat5e cables for the L1, L2 interconnects, per pair of fabric interconnects • At least four twinaxial cables per fabric interconnect
	Cisco UCS 6324	• Two 10/100/1000Mbps management ports • At least two twinaxial cables per fabric interconnect
Cisco Nexus 5000 and 7000 Series Switches	Cisco Nexus 5000 Series	• At least two 10GbE fiber or twinaxial cables per switch • At least two FC cables per switch (if FC/FCoE connectivity is required)
	Cisco Nexus 7000 Series	
Cisco Nexus 9000 Series Switches	Cisco Nexus 9000 Series	At least two 10GbE cables per switch
NetApp FAS controllers	AFF A-Series	• A pair of SAS or SATA cables per storage controller • At least two FC cables per controller, if using legacy FC • At least two 10GbE cables per controller • At least one GbE cable for management per controller • For ONTAP, eight short twinaxial cables are required per pair of cluster interconnect switches
	FAS Series	

Hardware	Model number	Cables required
NetApp disk shelves	DS212C	Two SAS, SATA, or FC cables per disk shelf
	DS224C	
	DS460C	
	NS224	Two 100Gbps copper cables per disk shelf