

Overview

Compaq Server Console Switches are key components for rack mount implementations (a console represents one keyboard, video monitor, and mouse (KVM) attached to a server). The family of Compaq Server Console Switches allows multiple servers in a rack to be accessed and managed by one keyboard, monitor, and mouse. Using a console, as many as 64 computers running different operating systems can be managed. The 4-Port and 8-Port Server Console Switches feature an On-Screen Display (OSD) interface, which has intuitive menus for accessing each attached computer. Servers can be identified by a user-defined name or sequentially by number, enabling easy access to connected servers.

Compaq Server Console Switches can be connected in a tiered fashion, to increase server access from four or eight servers to as many as 64 servers. Switching between computers is accomplished by typing a switching command at the keyboard, or by using the mouse to interact with the graphic interface of the selected computer.

The Compaq Server Console Switch family of products is available in 2-, 4-, and 8-Port versions. There are two 8-Port models, a single and a dual console version, allowing the flexibility of controlling switch configurations from more than one location, or by more than one user. Standard rack mounting of the Compaq Server Console Switches will take up 1U (1.75") of front panel rack space. However, the Switches can also be mounted in a "zero U" profile by mounting in the side rails of the rack, or behind the new Compaq 1U Keyboard Drawer, previously announced on April 6, 1999.

Every model delivers exceptional performance through leading edge switching design and engineering.

Models

1x4 Port KVM(US)	400336-001
CPU-to-Server Console Cables	
3 Foot (1 m)	110936-B24
7 Foot (2 m)	110936-B25
12 Foot (4 m)	110936-B21
20 Foot (6 m)	110936-B22
40 Foot (12 m)	110936-B23

Target Applications and Markets

Network Administrators, System Administrators, Engineering Managers, Chief Information Officers, and Managers of Information Systems are all among the users who will see very tangible benefits from using the Compaq family of server console switches.

- Easy access to multiple servers
- Multi-platform management from one console (Microsoft Windows, Novell, UNIX etc)
- Non-intrusive control and management of servers Compaq Server Console Switches are "out-of-band," allowing server activity to be viewed on multiple systems without interfering in any way.

Features

- **On-Screen Display (OSD)** - Displays system-related information on the console monitor, such as selected server name, status, power-up test data and configuration menus.
- **Programmable Scanning** - An evaluation of system performance can be made by sequentially scanning any or all of the computers in the system. Programmable scanning allows you to determine which computers to include as well as the duration of the connection.
- **Configuration NVRAM** - NVRAM (non-volatile RAM) makes it easy to set configuration information using commands entered from the keyboard. The NVRAM stores the resulting configuration until a user decision is made to change the information, even if the unit loses power.
- **Hardware Reset Switch** - If the keyboard or mouse communication is disrupted, the switch can be used to reset the unit without interrupting power to the system.
- **Password Protection** - For protection against unauthorized users, the switch box provides a password option for security purposes.
- **Switch Firmware Update** - The application code of the switch can be quickly and easily updated via FLASH ROM. The port communications settings are automatically configured to allow direct downloading from the connected computer.
- **Multiple Space Saving OU Installation Methods** -
 - Side Mount - Rails are provided for mounting the unit to the side of the rack cabinet.
 - Rear Rack Mount - In conjunction with a Compaq 1U Keyboard Drawer (338056-B21) slide rails are provided for mounting the unit behind the keyboard drawer.

Overview

Key Console Benefits

The Compaq Server Console Switches provide tangible benefits including -

- Easy access to multiple servers
- One or more persons can use more than one server or system (e.g., when there is a need to simply "switch" among several systems).
- One person can manage large numbers of servers in an organized fashion, from one console.
- Typically, at least 50 percent savings in floor space can be expected when using Compaq Console Server Switches in rack-mount configurations vs. non-rack mounted server configurations. In one typical lab, console switches were implemented within rack mount configurations to save 67 percent in required floor space.
- With fewer monitors, power bills are reduced considerably: one Compaq Server Console Switch controlling 8 computers from a single monitor reduces the monitor count by 7 (87 percent).
- Air conditioning costs are reduced due to the reduction in heat due to fewer monitors when a Compaq Console Server Switch is implemented and uses only one monitor.

The chart below shows an example of cost savings and financial return associated with console switch and rack-mount configurations in an urban east-coast data center.

Benefits	Estimated Savings and Cost Assumptions
Space Savings	\$96,000/yr (assuming \$20/sq. ft. x 400 sq. ft. x 12 months)
Equipment Savings	\$26,100 (assuming 87 keyboards, monitors and mice x \$300 each set)
Energy Savings	\$57,159/yr (assuming 87 monitors x 14.4kWh/day x \$0.125 x 365 days)
People/Time Savings	\$70,000/yr (assuming salary of 1 Network Administrator)
Console Switch Cost	\$15,080 (assuming \$1,160/server console switch x 13)
Total Savings	\$264,339

Which Model is Best?

Single-user Console Switches

The single-user Compaq Server Console Switches has one input (or user) port for one user console (one keyboard, monitor, and mouse) and multiple output (or system) ports for connecting multiple systems to the switch (one-to-many).

- One user has control over multiple computers with a single user switch.
- Single user switches can also be tiered (one switch connected to another) to expand the amount of systems controlled by one user. For example, an 8-port switch uses one of its output system ports to connect to another 8-port switch, yielding a total amount of 15 computers controlled by one user).

Models

Server Console Switch, 1x4-Port KVM (US)

400336-001

Specifications

Compaq Server Console Switch 4-Port, 8-Port, and Dual Console 8-Port Specifications	Dimensions	Height	1.71 in/4.5 cm		
		Depth	8 in/20.3 cm		
		Width	17 in/43.2 cm		
	Weight	4-Port	5.25 lbs/2.38 kg		
		8-Port	5.7 lbs/2.59 kg		
		Dual Console 8-Port	5.7 lbs/2.59 kg		
	Input Power Requirements	Rated Voltage	4-Port, 8-Port, Dual Console 8-Port AC	100 to 240V AC	
			Dual Console 8-Port DC	48V DC	
			4-Port, 8-Port, Dual Console 8-Port AC	50 to 60 Hz	
		Rated Frequency	8-Port AC	N/A	
			Dual Console 8-Port DC		
			4-Port, 8-Port, Dual Console 8-Port AC	1 to 0.5A	
	Temperature Range	Maximum Ambient Operating Temperature	50° to 104° F/10° to 40° C		
		Ambient Storage and Shipping Temperature	-40° to 185°F /-40° to 85° C		
		Maximum Internal Rack Temperature for the Switch Box	122° F/50° C		
Relative Humidity	Operating	20% to 80%			
	Non-operating	5% to 90%			

© Copyright 2004 Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.