HP ProCurve Switch 8200zl/5400zl/3500 Series

Ordering Guide

Part 1: zl series chassis power supply selection (PoE)

The HP ProCurve Switch 8200zl/5400zl/3500 series can power any device that adheres to the IEEE 802.3af (PoE) standard; additionally, the 8200zl and 5400zl series can power any device that adheres to the IEEE 802.3at (PoE+) standard. The switches will automatically detect how much power is needed when a compatible device is plugged into the port. Throughout this document, PoE and PoE+ will be referred to as PoE, except where there are distinct differences between PoE and PoE+ functionality.

The internal power supply for the HP ProCurve 3500 series switches provides both the system power and PoE power. There are three different power supplies available for the HP ProCurve Switch 8200zl/5400zl series. These power supplies provide system power (the power needed to run the switch itself) and PoE/PoE+ power (the power sent down the Ethernet cable to power the device at the other end). The difference between the power supplies is the amount of PoE power or PoE+ power available from the supply.

Power supply		12 V system power	50 V PoE power	54 V PoE+ power	Power supply total
J8712A	100–127 V	600 W	273 W	–	875 W
	200–240 V	600 W	273 W	–	875 W
J8713A	200–240 V	600 W	900 W	–	1500 W
J9306A	110–127 V	600 W	–	300 W	900 W
	200–240 V	600 W	–	900 W	1500 W

These differences will be discussed in Step 4 of the procedure following.

It is important to plan for peak PoE power needs so that sufficient power is available in the switch. When the peak power needs of the powered devices (PDs) connected to the switch exceed the PoE power available from the supplies, the PoE power priority in the switch is used to determine which ports lose PoE power. Consult the switch manual for a discussion of the PoE power priority capability. Ports that lose their PoE power will not be powered again to prevent them from turning on and off, unless the loss of power was due to a power supply failure. To avoid this situation, use this guide to correctly size the power supplies.

Choosing the number and type of supplies that are best for your solution is a four-step process.

Step 1: Determine your initial PoE power needs

Count the number of PDs and the PoE peak power each consumes. The actual peak power needed by a powered device should be available in the documentation or data sheet for that device. The 8200zl, 5400zl, and 3500 series switches can allocate actual PD power rounded up to the nearest watt. Add up the total wattage needed. Also add 22 W for each PoE and PoE+ module in the chassis. The first PD plugged into each module will release 17 W of this module's allotment back to the switch PoE power pool. For this reason, it is recommended to have at least one PD plugged into each PoE module as PDs are added to the switch.

Table 1. Use this table to determine your PoE power needs from Steps 1 and 2.

Power-consuming items			Power needed
Powered devices at each wattage:	_____ x 1 W =		_____ W
	_____ x 2 W =		_____ W
	_____ x 3 W =		_____ W
	_____ x 4 W =		_____ W
	_____ x 5 W =		_____ W
	_____ x 6 W =		_____ W
	_____ x 7 W =		_____ W
	_____ x 8 W =		_____ W
	_____ x 9 W =		_____ W
	_____ x 10 W =		_____ W
	_____ x 11 W =		_____ W
	_____ x 12 W =		_____ W
	_____ x 13 W =		_____ W
	_____ x 14 W =		_____ W
	_____ x 15 W =		_____ W
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	_____ x 24 W =		_____ W
	_____ x 25 W =		_____ W
	_____ x 26 W =		_____ W
	_____ x 27 W =		_____ W
	_____ x 28 W =		_____ W
	_____ x 29 W =		_____ W
	_____ x 30 W =		_____ W
			Subtotal: _____ W
# of PoE modules in switch without a PD plugged in	_____ x 22 W =		_____ W
# of PoE modules in switch with a PD plugged in	_____ x 5 W =		_____ W
			Subtotal: _____ W
Future PoE wattage desired			**Subtotal:** _____ W
			Total watts needed: _____ W

Step 2: Determine your future PoE power needs

PoE power: If you would like to plan for future PoE power needs now, determine how much extra PoE power you might need. Add this wattage to your figure from Step 1.

Table 2. Redundant power definitions

No redundancy	No power is held in reserve. For system power, if a power supply fails, some or all parts of the switch become inoperative. For PoE power, all power supplied by the available supplies can be used to power PDs. If a power supply fails, the amount of PoE power supplied by the failed supply is no longer available. The switch will turn off the number of PDs starting with the lowest PoE priority PD up to the wattage lost with the failed supply.
N+1 redundancy	For system power, one supply can fail and the entire switch remains functional. For PoE power, one power supply can fail without loss of power to any currently powered device. Under N+1, the switch will hold in reserve (not use) the amount of PoE power equal to the largest PoE supply. If a power supply fails, the reserve power is used to continue to power all PDs without interruption. N+1 redundancy may not protect against a failed external power main.
Full redundancy	For system power, one-half of the power supplies can fail and the entire switch remains functional. For PoE power, one-half of the power supplies can fail without power interruption to any connected nodes. The switch will hold at least one-half of the PoE power available from all supplies in reserve to be used in case of power supply failures. Full redundancy would be used if protection from a failed external power main is desired.

Step 3: Determine the required level of redundant power

See Table 2 for definitions of the various levels of redundancy.

No redundancy: Skip to Step 4.

System power redundancy: System power is the power needed to run the switching and routing functionality in the switch—essentially everything except PoE. One power supply is sufficient for full system power for HP ProCurve Switch 5406zl/8206zl systems; two power supplies are required for HP ProCurve Switch 8212zl/5412zl systems. Full system power redundancy is achieved with two power supplies for the 5406zl/8206zl systems and four power supplies for the 8212zl/5412zl systems.

Since there are only two power supply slots in 8206zl/5406zl chassis, system power N+1 redundancy and full redundancy are equivalent. 8212zl/5412zl systems can have system power N+1 with three supplies and full redundancy with four supplies.

PoE power redundancy: PoE wattage is the power necessary to power the external PDs connected to the switch. PoE power is independent from system power and is not used in powering the normal functions of the switch.

Determine the level of PoE power redundancy you desire. Table 2 has definitions for the different types of redundant power.

With software version K13.01 or later, the switch can be configured to automatically hold PoE power in reserve based on the desired level of redundancy. With prior software versions, the switch does not automatically hold any PoE power in reserve for redundancy. To ensure PoE redundancy with prior software versions, plan for the amount of power to be held in reserve, and keep the wattage needed for the level of redundancy desired in reserve by controlling the number of PDs on the switch.

For No redundancy: On failure of one power supply, PDs using PoE power equal to the PoE power available from the largest supply installed will have their PoE power turned off as the power supply losing power goes down. If after several seconds the switch determines that there is excess PoE power available with the remaining supply or supplies, the number of ports that can be turned back on—using the excess power available—will have their power restored.

For N+1 redundancy: For software version K13.xx or later, configure the switch to enforce N+1 redundancy. For prior software versions, hold in reserve the amount of PoE power available in the highest-powered power supply.

For Full redundancy: For software version K13.xx or later, configure the switch to enforce full redundancy. For prior software versions, hold half the amount of PoE power available in reserve if all power supplies in the switch provide the same level of PoE power. Determine full redundancy reserve power when unlike power supplies are installed by separating the installed power supplies into two columns so the total power in each column is as close in value as possible. Hold in reserve the amount of power from the column with the larger added power.

Step 4: Choose your power supply or supplies

There are three power supplies available for the HP ProCurve Switch 8200zl and 5400zl series.

Table 3. HP ProCurve Switch zl power supplies

Product number	Supply	System power	PoE power	Power main requirements
J8712A	HP ProCurve Switch zl 875 W Power Supply	600 W	273 W	110 V @ 12 A 220 V @ 5.5 A
J8713A[1]	HP ProCurve Switch zl 1500 W Power Supply	600 W	900 W	220 V @ 10 A only
J9306A	HP ProCurve 1500 W PoE+ zl Power Supply	600 W 600 W	300 W 900 W	110 V @ 13 A 220 V @ 10 A

[1] Use of the J8713A changes the switch altitude specification from 4.6 km (15,000 ft) to 3.1 km (10,000 ft).

PoE power available from the power supplies is computed by adding the PoE power from all of the installed supplies. If PoE power redundancy is desired, take into account the amount of PoE power that needs to be held in reserve when calculating power needs.

Mixing the J8712A and/or the J8713A power supplies with the J9306A in the same chassis is *not* supported.

Though installing the J8712A and J8713A power supplies in the same chassis is a supported configuration, it is strongly discouraged—particularly if some level of PoE power redundancy is wanted—since the amount of PoE power available upon power supply loss may not be intuitive.

For example, if full PoE power redundancy is wanted using 875 W and 1500 W power supplies, the 1500 W supply should be held in reserve. This would mean that only 273 W of PoE power should be used normally. While it is tempting to add the two supplies and divide by two (using 585 W and keeping 585 W in reserve), if power is lost from one supply, the full 900 W of the 1500 W supply may be missing, with only the 273 W of the 875 W supply available. This is obviously not enough to keep the 585 W of the normal environment up and running. Thus, there is no redundancy for some of the PDs in this scenario, even though that was desired. Proper power redundancy can be provided by uniformly employing power supplies of equivalent power capacity.

See Table 4 for the minimum and maximum power supply counts for the various zl switches.

Table 4. Switch power supply capacities

Product number	HP ProCurve switch product	Included supplies	Min. # of supplies needed	Max. # of supplies possible	Max. # of supplies with the power shelf
J8697A	5406zl chassis	None	1	2	4
J8699A	5406zl-48G	1 875 W	1	2	4
J9447A	5406zl-48G-PoE+	1 PoE+	1	2	4
J8698A	5412zl chassis	None	2	4	6
J8700A	5412zl-96G	2 875 W	2	4	6
J9448A	5412zl-96G-PoE+	2 PoE+	2	4	6
J9475A	8206zl base system	None	1	2	4
J8715A	8212zl base system	None	2	4	6
J9091A	8212zl chassis only (replacement)	None	2	4	6

Watch the amount of power drawn from the building power mains by the installed switch supplies. It adds up quickly. Refer to Table 1 for incoming power requirements. If power redundancy is very important, split the available power supplies between two separate building circuits. If one power main goes down, you will still have the other one to power the switch.
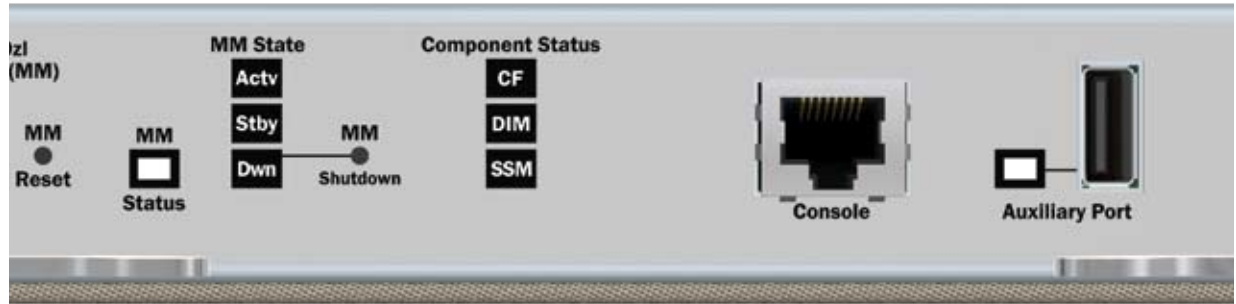
Note that the J8713A 1500 W supply is 200 to 240 V only.

PoE power levels

There are four PoE power levels defined by the PoE IEEE 802.3af standard.

Table 5. IEEE 802.3af power classes

IEEE 802.3af class	Power
0 (default)	15.4 W
1	4 W
2	7 W
3	15.4 W
4	30 W (PoE+)
Cisco pre-standard	6.3 W

Power cords

The power cords available for these switches are sized for the increased current that can be drawn to meet the needs of PoE. As a result, they are uncommon and it is recommended to have a few spares on hand. For more details, see Part 3 for the listing of power cords.

Using power cords not rated to carry the current drawn by a device could create a fire hazard. Use the proper power cord listed for your HP ProCurve equipment. Elevated operational temperatures reduce the amount of current that power cords can safely provide. The cords listed in Part 3 have been certified by HP ProCurve Networking to be adequate for the rated operating temperature range of our products, and use of any other power cord is not supported by HP ProCurve.

HP ProCurve 620 Redundant/ External Power Supply (RPS/EPS)

The HP ProCurve 620 Redundant/External Power Supply (J8696A) provides RPS and EPS power individually to two HP ProCurve 3500 series switches or RPS to two HP ProCurve 6200yl or HP ProCurve 2900 series switches. The HP ProCurve 620 RPS/EPS does not support the HP ProCurve Switch 8200zl or 5400zl series.

RPS power: Connecting the RPS provides full redundancy for the connected switch's system power.

EPS power: The HP ProCurve 620 RPS/EPS provides 398 W of additional PoE power to each of two connected HP ProCurve 3500 series switches. For an HP ProCurve Switch 3500yl-24G-PWR or HP ProCurve 3500-24-PoE, the internal power supply can power all 24 ports at 15.4 W for PoE. The additional power available from the HP ProCurve 620 RPS/EPS provides full redundancy for the PoE power.

If the HP ProCurve 620 RPS/EPS is connected to a HP ProCurve Switch 3500yl-48G-PWR or HP ProCurve Switch 3500-48-PoE, it allows all 48 ports to run at the full 15.4 W simultaneously but with no PoE power redundancy. The additional PoE power from the HP ProCurve 620 RPS/EPS could be used to provide full PoE power redundancy for 24 of the 48 ports, if that is needed, rather than additional power for the extra ports.

HP ProCurve Switch zl Power Supply Shelf

The HP ProCurve Switch zl power supply shelf (J8714A) provides two additional power supply bays for connection to one or two zl switches. By using the power supply shelf to provide extra EPS (PoE) power to the zl switch, the extra PoE power can be used to power additional PDs beyond what can be powered by the internal switch supplies or, more commonly, to provide for larger redundant PoE power environments, such as large VoIP installations.

The power supply shelf accepts the same power supplies available for the zl switches and connects to the switches via 2 m EPS cables included with the power supply shelf. The extra PoE power available via the power supply shelf is determined by the power supplies installed in the Shelf. See the HP ProCurve Switch zl Power Supply Shelf data sheet for more details.
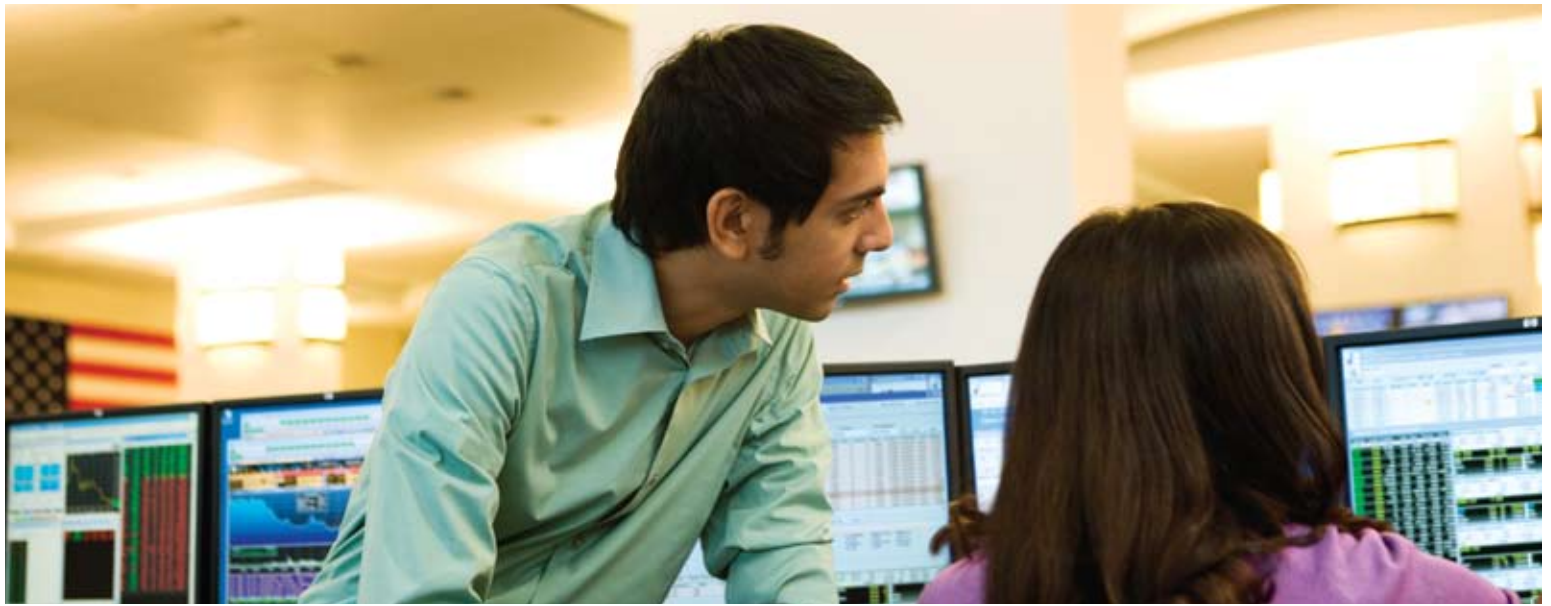
Part 2: Software licenses

The HP ProCurve Switch 8200zl, 5400zl, and 3500 series use the same software image base and ship with Intelligent Edge and IP-based routing feature sets standard. For these switches, an optional Premium License is available to enable Advanced Routing features. *NOTE: Legacy HP ProCurve Switch 8212zl (J8715A) products were shipped with Advanced Routing features standard—no Premium License upgrade is required for these switches.* For a detailed listing of these functionalities, please see the data sheets for the HP ProCurve Switch 8200zl, 5400zl, and 3500 series on our website at:
www.procurve.com.

Additional features might be required for deployments in the aggregation/distribution layer or if full routing is required in the wiring closet (see Figure 1). To meet these requirements, HP ProCurve provides the Premium License that contains the following features:

• OSPF

• PIM Sparse

• PIM Dense

• VRRP

• Q-in-Q (IEEE 802.1ad)

While all 8200zl, 5400zl, and 3500 series switches include Routing Information Protocol (RIP) that could be used to route IP traffic, OSPF is a better choice in all but the smallest environments. RIP is primarily used to provide a way to get network traffic from one VLAN to another in small environments.

To enable Advanced Routing feature set, please order the Premium License specific to the switch series:

• 8200zl series: J9474A—HP ProCurve Switch 8200zl Premium License

• 5400zl series: J8994A—HP ProCurve Switch 5400zl Premium License

• 3500 series: J8993A—HP ProCurve Switch 3500 Premium License

Each Premium License product provides license-to-use for a single 8200zl/5400zl/3500 series switch. Each license can be added to the switch manually through the MyProCurve Portal website using the registration ID included with the Premium License, along with some information obtained from the switch. The portal will then provide a license key that is entered into the switch and will enable the features.

HP ProCurve Manager (PCM) or ProCurve Manager Plus can be used to simplify the process of adding licenses. Just provide the registration ID from the Premium License and tell PCM onto which switch to install the license. PCM will communicate with the MyProCurve Portal directly and add the license to the switch without user intervention.

A previously installed license can be removed from an 8200zl, 5400zl, or 3500 series switch and transferred to another switch within the same product series.

Figure 1: Edge and aggregation/distribution use models
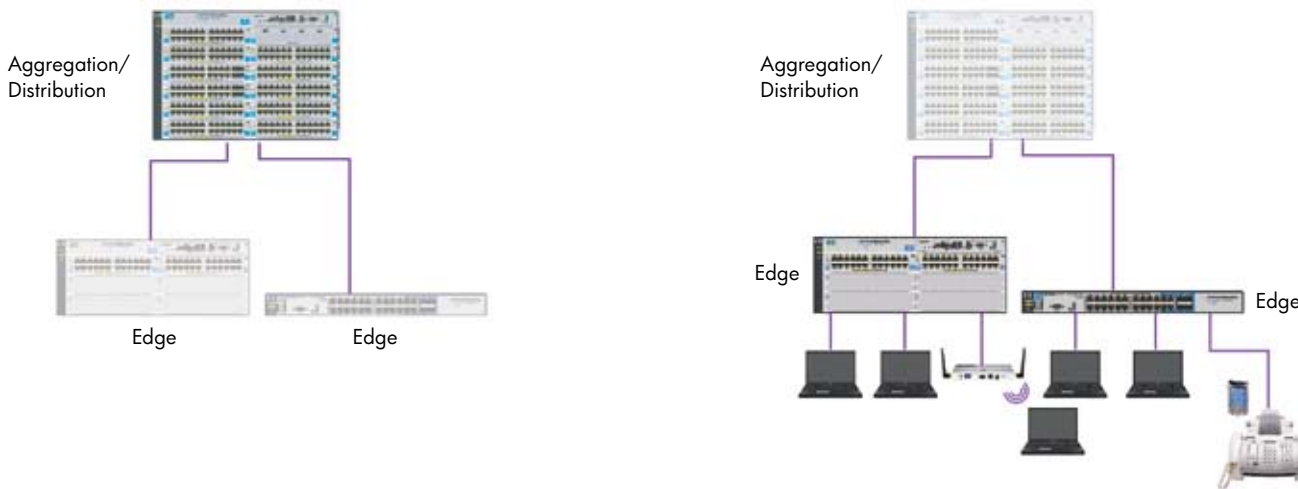
Software updates[1] for existing customers

In keeping with the longstanding value from HP ProCurve Networking, software updates when provided will be free of charge to existing customers.

Part 3: Field-replaceable units

The HP ProCurve Switch 5400zl management module and fan tray are field-replaceable. For the Switch 8200zl series, the management modules, fan tray, fabric modules and system support module (SSM) are field-replaceable. The switches are covered by the ProCurve Lifetime Warranty♦ with next-business-day replacement. Onsite spares stocking is strongly encouraged to help ensure minimal downtime if a management module or fan tray must be replaced.

In addition, rack-mounting kits are available for HP 10000 Series four-post racks and other four-post racks using the standard EIA unit of measurement.

All of these parts are available through the HP Parts website (**www.hp.com/buy/parts**).

Spare management module

While past experience on other HP ProCurve switches has shown an extremely low failure rate on the management functionality, there may be some customers who would like to have a spare management module on hand. Upon failure, the management module can be swapped out to restore switch functionality.

Replacement management modules do not include a CompactFlash unit as shipped by HP through the HP Parts website. When replacing a management module, customers should redeploy the CompactFlash unit from the replaced module to "carry-over" configuration files and switch software from the previous module. A standalone CompactFlash (CF) kit can be purchased separately.

	Part number
HP ProCurve Switch 5400zl Management Module (does not include CF card)	J8726-61001
HP ProCurve Switch 8200zl Management Module (does not include CF card)	J9092A
Programmed CompactFlash Kit for 5400zl Management Module	5070-1056
Programmed CompactFlash Kit for 8200zl Management Module	5070-3051

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[1] Software updates are done on a best-effort basis without commitment for future functional enhancements.

♦ For as long as you own the product, with next-business-day advance replacement (available in most countries). The following hardware products and their related series modules have a one-year hardware warranty with extensions available: HP ProCurve Routing Switch 9300m series, HP ProCurve Switch 8100fl series, HP ProCurve Network Access Controller 800, and HP ProCurve DCM Controller. The following hardware mobility products have a one-year hardware warranty with extensions available: HP ProCurve M111 Client Bridge, HP ProCurve MSM3xx-R Access Points, HP ProCurve MSM7xx Mobility and Access Controllers, HP ProCurve RF Manager IDS/IPS Systems, HP ProCurve MSM Power Supplies, HP ProCurve 1 Port Power Injector, HP ProCurve CNMS Appliances, and HP ProCurve MSM317 Access Device. Disk drives in the HP ProCurve ONE Services zl Modules, HP ProCurve Threat Management Services zl Module, and HP ProCurve MSM765zl Mobility Controller have a five-year hardware warranty. Standalone software, upgrades, or licenses may have a different warranty duration. For details, refer to the ProCurve Software License, Warranty, and Support booklet at www.procurve.com/warranty.

Fan tray

HP ProCurve Switch 8200zl/5400zl series fan trays can be hot-swapped without system disruption as long as the new tray is installed within three minutes of the previous tray being removed.

Replacing the HP ProCurve Switch 3500 or Switch 6200yl series fan tray requires that the switch be removed from the rack, power removed, and the top of the switch opened.

	Part number
HP ProCurve Switch 8206zl Fan Tray	J9476A
HP ProCurve Switch 8212zl Fan Tray	J9094A
HP ProCurve Switch 5406zl Fan Tray	J8697-60005
HP ProCurve Switch 5412zl Fan Tray	J8698-60005
HP ProCurve Switch 3500/6200yl Fan Tray	5069-8598

Spare 8200zl fabric module

HP ProCurve Switch 8200zl series base systems ship with required fabric modules, but spare modules can be ordered to be on hand in the event of a failure. One fabric module is required, and replacement fabric modules can be swapped out during switch operation with minimal interruption to switch service.

	Part number
HP ProCurve Switch 8200zl Fabric Module	J9093A

Spare 8200zl system support module

The HP ProCurve Switch 8200zl series requires a system support module (SSM), and spare modules can be ordered because this module is a critical system component. The spare SSM ships with the tool required for removal of the SSM from the 8200zl chassis, and replacement should be done during a scheduled maintenance window because the SSM is not a hot-swappable component.

	Part number
HP ProCurve Switch 8200zl System Support Module	J9095A

Rack-mounting kit

The switches normally ship with rack-mounting "ears" that allow installation into a two-post, 19-inch datacomm rack.

	Part number
Two-Post Rack-Mounting Kit for Switch 5406zl	5069-8561
Two-Post Rack-Mounting Kit for Switch 5412zl	5069-8562
Switch 3500/6200yl Rack-Mounting Kit	5069-5705
Two-Post Rack-Mounting Kit for Switch 8206zl	5070-6865
Two-Post Rack-Mounting Kit for Switch 8212zl	5070-2983
Switch zl Power Supply Shelf Rack-Mounting Kit	5070-3028

If installation using an HP 10000 Series four-post 19-inch cabinet is desired, a rack-mounting kit is available providing rails that give sturdy support for the switch along its entire length.

	Part number
For 8200zl/5400zl—10K Rack Rail Kit Assembly	5070-0145
For 3500/6200yl—10K Rack Rail Kit Assembly	356578-B21*

* Ordered through your HP sales channel

For transporting switches in a rack, please see the *Installation Guide* that is included with the rack rail kits for more instructions.

RPS/EPS and console cables

The HP ProCurve 620 Redundant/External Power Supply (J8696A) and the HP ProCurve Switch zl Power Supply Shelf (J8714A) use cables to individually connect the RPS (620 only) and EPS (PoE) power to the target HP ProCurve 8200zl/5400zl or 3500/6200yl series switches. The same cable is used for either RPS or EPS power. The HP ProCurve 620 RPS/EPS comes with four of these cables and the power supply shelf comes with two, which are the respective maximum number of cables usable for each of these units. If a spare cable is desired, use the product number in the following table.

Note: Even though the RPS/EPS cables are interchangeable between the HP ProCurve 620 and Switch zl power supply shelf, the 620 does not support 8200zl/5400zl series switches, while the Power Supply Shelf works *only* with 8200zl/5400zl switches.

	Part number
Switch zl and yl RPS/EPS cable	5070-0102
DB9-DB9 Console cable for 5400zl Series	5184-1894
RJ45-to-DB9 Console cable for 8200zl Series	5188-6699

Power cords

The power cords available for these switches are sized for the increased current that can be drawn to meet the needs of PoE. As a result, these power cords may not be found in a typical environment, and power cords "borrowed" from other products will not work in most instances. Having some spare power cords on hand may be a good idea. They can be purchased through the HP Parts website: **www.hp.com/buy/parts**.

	HP ProCurve Switch 3500/6200yl Series	HP ProCurve 620 Red/Ext Power Supply (J8696A)
Australia/ New Zealand	8120-5335	8121-0871
China	8120-8385	8121-0916
Continental Europe	8120-5336	8120-6352
Denmark	8120-5340	8120-6897
Israel	8121-1009	8121-1010
Japan	8120-5342	8121-0942[1] 8120-6903[2]
South Africa/India	8120-5341	8121-0915
Switzerland	8120-5339	8121-0916
Taiwan	8121-0967	8121-0968
Thailand	8121-0671	8121-0922
U.K.	8120-5334	8121-0907
Hong Kong/Singapore	8120-5334	8121-0907
U.S./Canada/Mexico	8121-0973	8120-6361

[1] 100 V cord: ships standard with the 620 after April 1, 2007
[2] 200 V cord: ships standard with the 620 prior to April 1, 2007

	HP ProCurve Switch 8200zl/5400zl Series and HP ProCurve Switch zl Power Supply Shelf (J8714A)		
	1500 W PoE+ Supply	875 W Supply	1500 W Supply
Australia/ New Zealand	8121-0857	8121-0857	8121-0871
China	8121-1034	8121-1034	8121-0924
Continental Europe	8120-5336	8120-5336	8120-6899
Denmark	8120-5340	8120-5340	8120-6897
Israel	8121-1009	8121-1009	8121-1010
Japan	8120-5342	8120-5342	8120-6903
South Africa/India	8120-5341	8120-5341	8121-0915
Switzerland	8120-5339	8120-5339	8120-6897
Taiwan	8121-0941	8121-0941	8120-6903
Thailand	8121-0671	8121-0671	8121-0675
U.K.	8120-5334	8120-5334	8120-6898
Hong Kong/Singapore	8120-5334	8120-5334	8120-6898
U.S./Canada/Mexico	8121-0973	8121-0973	8120-6903

Jumper cables (PDU to product)

If power interconnects between a switch and a power distribution device, such as a power distribution unit (PDU) or an uninterruptible power supply (UPS) is desired, jumper cables are available. The jumper cables for these switches are sized for the increased current that can be drawn to meet the needs of PoE. As a result, these jumper cables meet the environmental and electrical specifications of HP ProCurve switches. Jumper cables "borrowed" from other products will not work in most instances. The jumper cables can be purchased through the HP Parts website: **www.hp.com/buy/parts**.

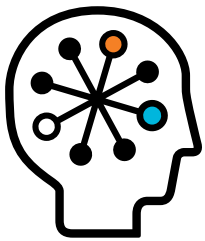|	Length (meters)	HP ProCurve Switch 3500/6200yl Series[1]	HP ProCurve 620 Red/Ext Power Supply (J8696A)[2]
Australia/ New Zealand	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
China	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Continental Europe	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Denmark	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Israel	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Japan	1 m 2.5 m	8121-1092 8121-1091	8121-1089 8121-1090
South Africa/India	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Switzerland	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Taiwan	1 m 2.5 m	8121-1092 8121-1091	8121-1089 8121-1090
Thailand	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
U.K.	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Hong Kong/Singapore	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
U.S./Canada/Mexico	1 m 2.5 m	8121-1092 8121-1091	8121-1089 8121-1090

[1] C14 to C15 cable: The C15 connector connects into the power inlet on the switch power supply, while the C14 connector connects into a receptacle on a power distribution device.

[2] C19 to C20 cable: The C19 connector connects into the power inlet on the switch power supply, while the C20 connector connects into a receptacle on a power distribution device.

	Length (meters)	HP ProCurve 8200zl/5400zl Switch and HP ProCurve Switch zl Power Supply Shelf (J8714A)	
		1500 W PoE+ or 875 W Supply[1]	1500 W Supply[2]
Australia/ New Zealand	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
China	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Continental Europe	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Denmark	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Israel	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Japan	1 m 2.5 m	8121-1092 8121-1091	8121-1089 8121-1090
South Africa/India	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Switzerland	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Taiwan	1 m 2.5 m	8121-1092 8121-1091	8121-1089 8121-1090
Thailand	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
U.K.	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
Hong Kong/Singapore	1 m 2.5 m	8121-1093 8121-1094	8121-1089 8121-1090
U.S./Canada/Mexico	1 m 2.5 m	8121-1092 8121-1091	8121-1089 8121-1090

[1] C14 to C15 cable: The C15 connector connects into the power inlet on the switch power supply, while the C14 connector connects into a receptacle on a power distribution device.

[2] C19 to C20 cable: The C19 connector connects into the power inlet on the switch power supply, while the C20 connector connects into a receptacle on a power distribution device.

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