



Installation Guide

ProCurve Switch 3500yl Module

ProCurve Switch yl Module

Installation Guide

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Applicable Products

ProCurve Switch 3500yl 2p 10-GbE X2 + 2p CX4 Module (J8694A)
ProCurve 10-GbE X2 SR-SC Xcvr (J8436A)
ProCurve 10-GbE X2 LR-SC Xcvr (J8437A)
ProCurve 10-GbE X2 ER-SC Xcvr (J8438A)
ProCurve 10-GbE X2 CX4 Media Converter (J8439A)
ProCurve 10-GbE X2 CX4 Xcvr (J8440A)

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Warranty

See the Customer Support/Warranty booklet included with the product.

A copy of the specific warranty terms applicable to your ProCurve product and replacement parts can be obtained from your ProCurve sales and service office or ProCurve authorized reseller.

Safety

Before installing and operating these products, please read the "Installation Precautions" on [page 4](#), "Installing a Module", and the regulatory statements beginning on [page 21](#).

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ProCurve Switch yl Module

Descriptions

The ProCurve Switch yl Module are components you can add to a ProCurve yl switch to provide a variety of network connectivity options. The following module is available as of this printing:

Module	Description
ProCurve Switch 3500yl 2p 10-GbE X2 + 2p CX4 Module (J8694A)*	4-port 10 Gigabit switch expansion module. This module has two Media Flex ports for supported transceivers and two fixed CX4 ports.



* **Supported transceivers:** The following ProCurve transceivers are supported by the Media Flex ports on the module (as of this printing):

- 10 Gigabit-X2-SC SR Optic transceiver (J8436A)
- 10 Gigabit-X2-SC LR Optic transceiver (J8437A)
- 10 Gigabit-X2-SC ER Optic transceiver (J8438A)
- 10 Gigabit-X2-CX4 copper transceiver (J8440A)
 - 10 Gigabit-X2-CX4 Optical Media Converter (OMC) (J8439A) - This OMC is supported for use only on the fixed copper ports (port number 2 and 3). It is not supported for use with the copper transceiver (J8440A) installed in ports 1 or 4.

This module requires switch software version K.11.00 or later to be installed in the switch.

Contact your ProCurve authorized networking products reseller or your ProCurve representative for information on availability of other modules and transceivers. You can also visit the ProCurve networking products Web site <http://www.procurve.com> to get more information.

Features

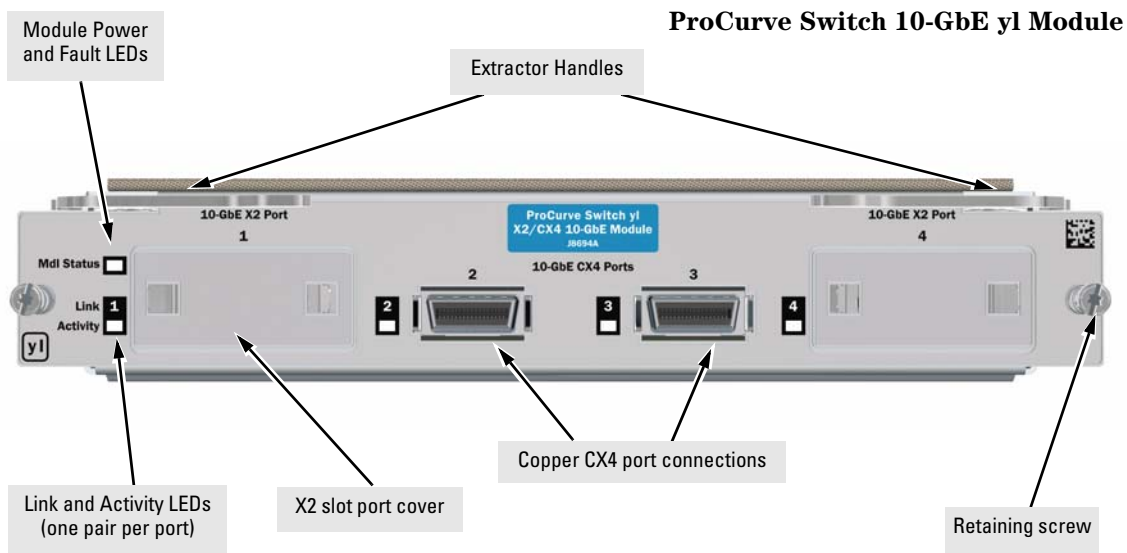


Figure 1. Front of Module

The ProCurve Switch yl Module has the following features:

- Connectivity to both copper and fiber.
- LEDs that provide information for each port on the link status, network activity.
- LEDs that provide information on Module power and Module fault conditions.
- “hot swap transceiver” support—you can add, replace, or change the type of any of the transceivers that you use in the Media Flex ports, without having to first remove the module, and without having to shut down the switch.

Standards adherence:

- IEEE 802.3ak CX4
- IEEE 802.3ae XAUI
- Compliant with X2 and MSA

Installing the Module

You can install the module into any of the ProCurve yl Switches that have a compatible module slot. As of this printing, those are the ProCurve Series 3500yl Switches:

- 3500yl-24G-PWR (J8692A)
- 3500yl-48G-PWR (J8693A)

ProCurve Series 6200yl Switch:

- 6200yl-24G mGBIC (J8992A)

“Hot Swap”

Notes

The transceivers can be “hot swapped”. That is, they can be installed or removed after the module is installed in the switch and the module is receiving power.

The expansion yl module itself is not “hot-swappable” or “hot pluggable.” You cannot insert or remove a module while the switch is powered on without interrupting the operation of the rest of the switch ports. If you install or remove an expansion yl module with the switch powered on, a reboot will occur.

ProCurve recommends the switch be powered off before beginning this procedure.

1. Install a module (see [page 5](#)).
2. If you are using the Media Flex ports of the module, install the transceivers in the module. You can install the transceivers before or after installing the module into the switch (see [page 6](#)).
3. Verify the module is installed correctly (see [page 8](#)).
4. Connect the network cabling (see [page 9](#)).
5. Verify the network connections are working properly (see [page 11](#)).

Installing a Module

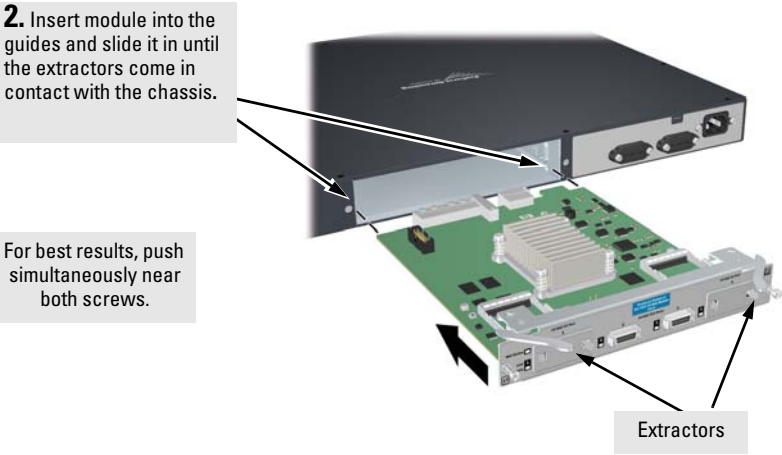
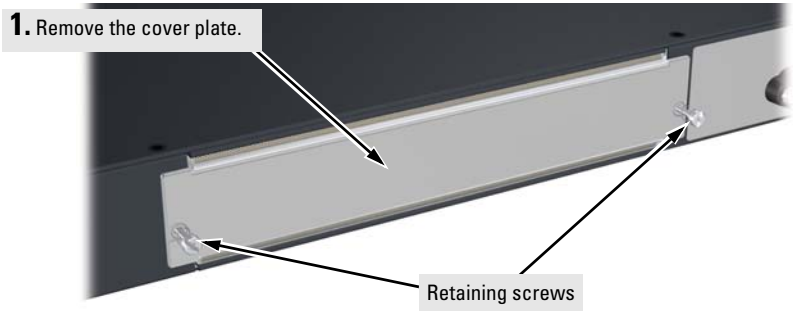
Installation Precautions:

- Static electricity can severely damage the electronic components on the module. When handling and installing the module in your switch, follow these procedures to avoid damage from static electricity:
 - Handle the module by its bulkhead or edges and avoid touching the components and the circuitry on the board.
 - When installing the module, equalize any static charge difference between your body and the switch by wearing a grounding wrist strap and attaching it to the switch's metal body, or by frequently touching the switch's metal body.
- **The ProCurve Switch yl Module has “low-force”, high-performance connectors. High insertion forces are not necessary to install the module, and should not be used.**
- **Ensure you fully insert the module.** That is, press the module into the slot until the bulkhead on the module is contacting or is very close to contacting the front face of the switch chassis. Use the extractor handles to seat the module completely.
- Once the module is fully inserted, make sure to screw in the two retaining screws to secure the module in place.
- For safe operation, proper switch cooling, and reduction of electromagnetic emissions, ensure that a slot cover is installed on any unused module slot.
- Do not install the switch in an environment where the operating ambient temperature might exceed 55°C (131°F)¹.

¹ If you are installing either the Series 3500yl or 6200yl Switches with an X2 transceiver installed, the operating ambient temperature should not exceed 40°C (104°F). See transceiver specifications on [page 17](#).

Installation Procedures:

1. Use a Torx T-10 or flat-bladed screwdriver to unscrew the screws in the cover plate over the slot, and remove the cover. Store the cover plate for possible future use.
2. Hold the module by its bulkhead—taking care not to touch the metal connectors or components on the board.
3. Insert the module into the slot guides and slide it into the slot until the extractors come in contact with the chassis.
4. Use an equal amount of pressure and push both extractor handles closed to completely seat the module.
5. Tighten the retaining screws.



Installing or Removing the transceivers

You can install or remove a transceiver from the Media Flex ports without having to power off the switch. Use only ProCurve transceivers.

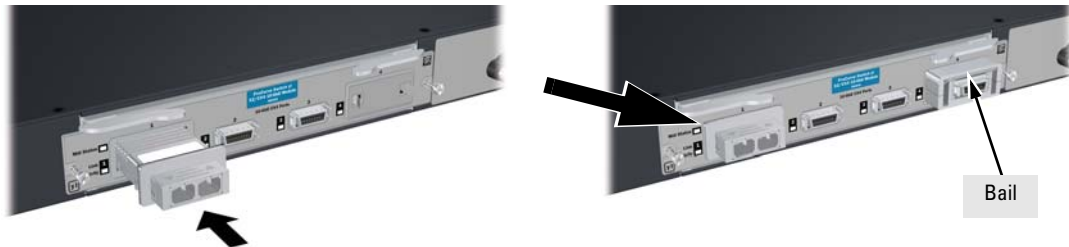
Installing the transceivers:

1. Remove a port cover by squeezing the metal tabs together.
2. Slide the transceiver into the slot until it stops¹.
3. Push firmly until you hear a click and the gasket seats against the bulk-head.

Note

When switch power is on, the Link and Activity LEDs will come on for approximately two seconds and then go off. This is confirmation the transceiver is installed.

4. If your transceiver has a bail, move the bail up to lock the transceiver in place, if not your transceiver is now completely installed. Network cables can now be connected, see [page 9](#).



¹ If you are installing either the Series 3500yl or 6200yl Switches with an X2 transceiver installed, the operating ambient temperature should not exceed 40°C (104°F). See transceiver specifications on [page 17](#).

Figure 2. Installing a Transceiver

Removing the transceivers:

You should disconnect the network cable from the transceiver before removing it from the module.

If your transceiver has a wire bail, lower the bail until it is approximately horizontal, and then using the bail, pull the transceiver from the slot. If your transceiver does not have a bail, pull the transceiver straight out.

Installing or Removing the Optical Media Converter

You can connect an Optical Media Converter (OMC) to the fixed ports only. Use only ProCurve OMCs.

Installing the OMC:

1. Connect the OMC to the fixed port.
2. Push it until it clicks.



Figure 3. Installing an OMC

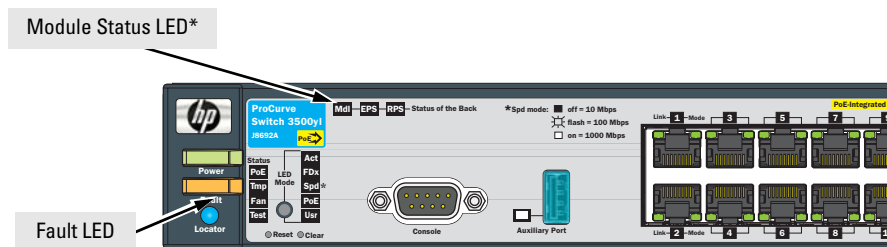
The OMC has a single bi-color LED to indicate power and link. The LED is orange when the OMC has power but no link. The LED turns green when a link is established.

Removing the OMC:

1. Disconnect the network cable from the OMC before removing it from the module.
2. Grasp the extractor handle and pull straight out.

Verifying the Module is Installed Correctly

Observe the Module Status and Fault LEDs on the front of the switch to verify the module is installed properly.



*The Module Status LED is located in the same place on the 3500yl and 6200yl Switches.

Figure 4. Location of Module Status LEDs

When the module is installed properly and the switch is powered on, or the module is installed when the switch already has power, the module undergoes a self test that takes a few seconds. You can use the LEDs to determine that the module is installed properly and has passed the self test, as described in the “LED Behavior” table below.

LED Behavior

LED	Display for a Properly Installed Module
Mdl Status on the front of the switch	The LED goes ON as soon as the module is installed and the switch is powered on, and stays ON steadily.
Mdl Status on the module	The LED goes ON as soon as the module is installed and the switch is powered on, and stays ON steadily.
Fault	OFF normal state, no fault condition exist.
Link (on the module)	The LED goes ON to indicate the port is enabled, connected and detects a signal from the attached device.
Activity (on the module)	The LED blinks to show relative activity.

Connecting the Network Cables

Supported Cable Types

Table 5. Fiber-Optic Cables

Port Type	Cable Specifications	Connector Type	Supported Length
10-GbE SR	Multimode fiber-optic cable designed for Gigabit Ethernet: 62.5/125 μm (core/cladding) diameter or 50/125 μm , 850 nm, low metal content, complying with the ITU-T G.652 and ISO/IEC 793-2 Type B1 standards.	SC	<ul style="list-style-type: none"> ■ 62.5 μm cable: <ul style="list-style-type: none"> • 160 Mhz/km = 2-26 meters • 200 Mhz/km = 2-33 meters ■ 50 μm cable: <ul style="list-style-type: none"> • 400 Mhz/km = 2-66 meters • 500 Mhz/km = 2-82 meters • 2000 Mhz/km = 2-300 meters
10-GbE LR	9/125 μm (core/cladding) diameter, 1310 nm, low metal content, single mode fiber-optic cables, complying with the ITU-T G.652 and ISO/IEC 793-2 Type B1 standards.	SC	single-mode cable: 2-10 kilometers
10-GbE ER	9/125 μm (core/cladding) diameter, 1550 nm, low metal content, single mode fiber-optic cables, complying with the ITU-T G.652 and ISO/IEC 793-2 Type B1 standards.	SC	single-mode cable: 2-30 kilometers (40 kilometers, on an engineered fiber optic link that meets standards in the specification).
Note: Conditioning patch cord cables are not supported on 10-GbE speeds.			

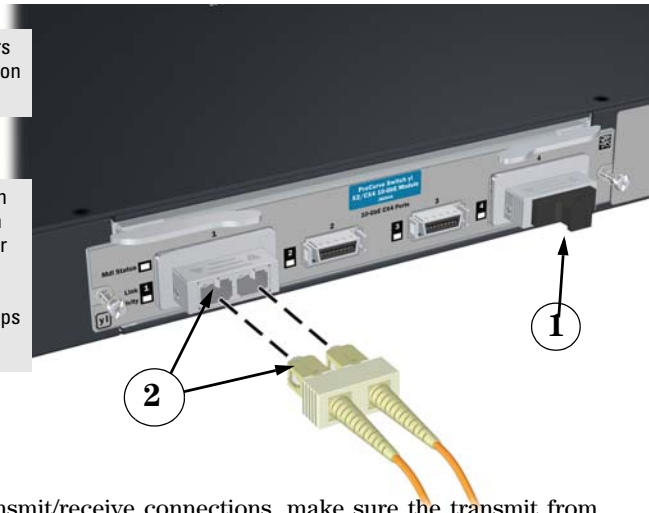
Table 6. Copper Cables

Port Type	Cable Specifications	Connector Type	Supported Length
CX4	Speed 3.125Gbx4 (Cables compliant with the 802.3ak standard)	CX4	0.5-15 meters
OMC CX4 Fiber	12 fiber 50/125 μm (core/cladding) diameter, multimode Fiber ribbon cable. 12 fiber 62.5/125 μm (core/cladding) diameter, multimode Fiber ribbon cable is also supported.	Optical Media Converter	150 Mhz/km = 1-50 meters 500 Mhz/km = 1-100 meters 2000 Mhz/km = 1-300 meters

Connecting Cables

1. Remove the dust covers from the cable connectors on the transceiver port.

2. Aligning the notches on the cable connectors with the slots of the transceiver ports, press the cable connector into the transceiver port until it snaps into place.



Note

To ensure proper transmit/receive connections, make sure the transmit from one device is connected to the receive of the other device.

Figure 7. Connecting the Fiber Cable

1. Push the copper cable connector into the copper transceiver port.

2. Push the handle in to engage the locking clips.

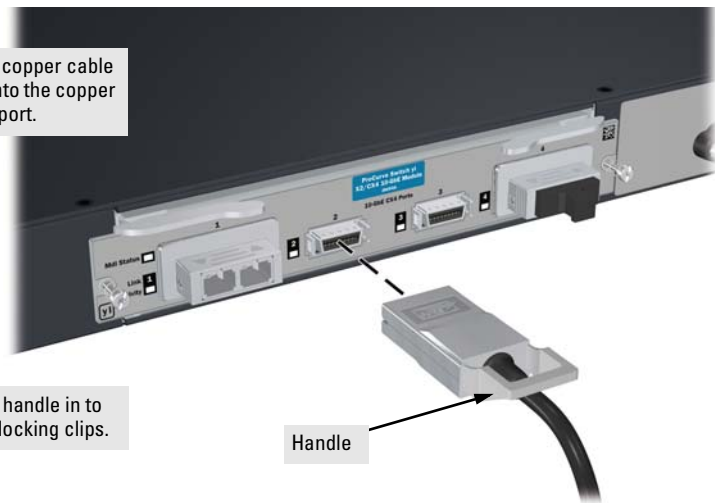


Figure 8. Connecting the Copper Cable

Verifying the Network Connections Are Working

Check the port LEDs for the newly-installed module to ensure the port(s) connected in the preceding step are operating correctly. Each port on the switch module has Link and Activity LEDs near it as shown in the next illustration.



Figure 9. Example Link and Activity LEDs

- The Link LED will be lit for each port that is connected properly to an active network device.

If the Link LED does not go on when an active network cable is connected to the port, there may be something wrong with the cable, the cable connectors, or the device at the other end of the cable. See the LED Behavior on [page 8](#) and troubleshooting information on [page 14](#).

- The Activity LED will flicker when traffic is detected on the port and the port is transmitting and/or receiving packets.

Removing a Module

Note

Installing or removing a module with the switch powered on causes a switch reset to occur. ProCurve recommends the switch be powered off before beginning this procedure.

Follow these procedures to remove a module:

1. Remove any network cables from the ports on the module.
2. On the module unscrew the retaining screws enough to disconnect them from the threaded holes in the switch.

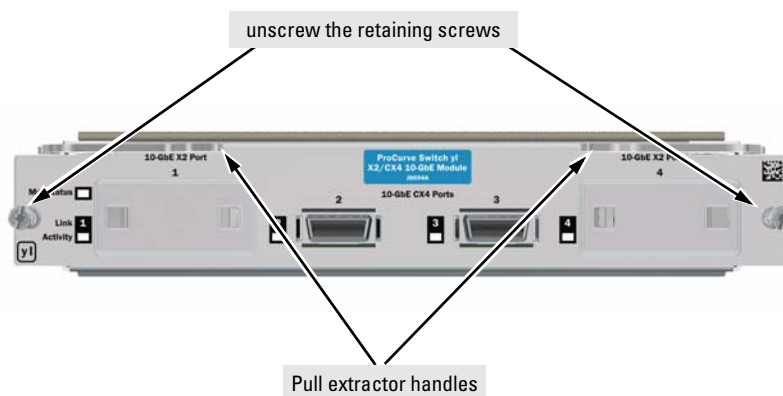


Figure 10. Removing a Module

3. Using the extractor handles, pull the module out from the slot.
4. Do one of the following:
 - If you will be installing another module in the slot, go to “Installing a Module” on [page 4](#) and begin with [step 2](#).
 - If you will not install another module in the slot (that is, leave it empty), then re-install a slot cover plate over the empty slot opening.

Caution

For proper cooling and reduction of electromagnetic emissions, ensure a slot cover is installed on any unused slot.

Resetting the Switch

Reasons for Resetting the Switch

Generally, you only need to reset the switch when it needs to recognize a change in its hardware or software (console) configuration. Some circumstances in which you will need to reset the switch are:

- Installing a new module. The switch must be reset after the new module is installed so the switch processor can properly initialize and configure the new module.
- Changing certain switch configuration parameters through the console interface. (In this case, the console provides indications when the switch must be reset for the configuration change to be activated.)

Methods of Resetting the Switch

You can reset the switch by any of these methods:

- pressing the Reset button on the front of the switch
- power cycling the switch (if both power supplies are being used, you will have to disconnect both power cords)
- issuing the **boot system** command from the switch console CLI, or selecting the Reboot Switch option from the switch menu interface

Troubleshooting

One of the primary tools for troubleshooting the switch module is the LEDs on the front of the switch and on the module. Refer to “LED Behavior” on [page 8](#) for a description of the normal LED behavior. Also, refer to the switch *Installation and Getting Started Guide* for more detailed troubleshooting information for the switch.

LED Error Indicators:

Switch LEDs			Module LEDs			Diagnostic Tips
Fault	Test	Module Status	Module (Mdl) Status	Link	Activity	
Blinking ¹	Blinking ¹	Blinking ¹		Blinking ¹		❶
Blinking	Blinking	Blinking	On	Blinking	Off	❷
Off	Off	On		Off with cable connected		❸
Blinking	On	Blinking	Off	3	3	❹
Blinking		Blinking		Blinking		❺

¹ The blinking behavior is an on/off cycle once every 1.6 seconds, approximately.

² The fast blinking behavior is an on/off cycle once every 0.8 seconds, approximately.

³ This LED is not important for the diagnosis.

Diagnostic Tips:

See the table on the next page to diagnose the LED error indicators in the previous table.

Tip Number	Problem	Solution
❶	The network port for which the Link LED is blinking has experienced a self test or initialization failure.	During the module self test (described in item 1 above), each network port is also tested. If the port self test fails, the individual port is not usable, but the rest of the ports on the module, which have passed their self test, will continue to operate normally.
❷	A port on the expansion y1 module has a failure	If it is a Media Flex port, try reseating the transceiver. If it is a fixed copper port, you may have to replace the module.

Tip Number	Problem	Solution
3	The network connection is not working properly.	<p>Try the following procedures:</p> <ul style="list-style-type: none"> • For the indicated port, verify both ends of the cabling, at the switch and the connected device, are securely connected. • Verify the connected device and switch are both powered <i>on</i> and operating correctly. • Verify you have used the correct cable type for the connection. See “Connecting the Network Cables” on page 9 for the correct cable specifications. <ul style="list-style-type: none"> – for fiber-optic connections, verify the transmit port on the switch is connected to the receive port on the connected device, and the switch receive port is connected to the transmit port on the connected device. • Verify the port has not been disabled through a switch configuration change. You can use the console interface, or, if you have configured an IP address on the switch, use the web browser interface, or ProCurve Manager network management software to determine the state of the port and re-enable the port if necessary. • Verify the switch port configuration matches the configuration of the connected device. For example, if the switch port is configured as “Auto”, the port on the connected device also MUST be configured as “Auto”. If the configurations don’t match, the results could be a very unreliable connection or no link at all. • If the other procedures don’t resolve the problem, try using a different port or a different cable.
4	The expansion module has a power failure	Try re-seating the module and rebooting the switch. If this does not clear the error call your ProCurve authorized LAN dealer, or use the electronic support services from ProCurve to get assistance. See the Customer Support/Warranty booklet for more information.
5	There is something wrong with the link.	The transceiver or cable may have failed. Check all connections for proper seating.

Customer Support Services

If you are having any trouble with your module or switch, Hewlett-Packard offers support 24 hours a day, seven days a week through the use of a number of automated electronic services. See the Customer Support/Warranty booklet that came with your switch for information on how to use these services to get technical support. The ProCurve networking products Web site, <http://www.procurve.com> also provides up-to-date support information. Additionally, your ProCurve authorized network reseller can also provide you with assistance, both with services they offer and with services offered by ProCurve.

Specifications

Physical

Module

Width:	185.4 mm (7.3 in)
Depth:	197 mm (7.76 in)
Height:	36.3 mm (1.43 in)
Weight:	0.7 kg (1.5 lbs)

TRANSCEIVERS

Width:	42.00 mm (1.65 in)
Depth:	91.00 mm (3.58 in)
Height:	19.46 mm (0.766 in)

Environmental

MODULE

	Operating	Non-Operating
Temperature:	0°C to 55°C (32°F to 131°F) ¹	-40°C to 70°C (-40°F to 158°F)
Relative humidity: (non-condensing)	15% to 95% at 40°C (104°F)	15% to 90% at 65°C (149°F)
Maximum altitude:	4.6 Km (15,000 ft)	4.6 Km (15,000 ft)
¹ If you are installing either the Series 3500yl or 6200yl Switches using one of the X2 transceivers, the operating ambient temperature should not exceed 40°C (104°F). See transceiver specifications.		

TRANSCEIVERS

Temperature: SR Optic J8436A LR Optic J8437A ER Optic J8438A Copper J8440A	0°C to 40°C (32°F to 104°F)
Relative humidity: (non-condensing)	15% to 95% at 40°C (104°F)
Maximum altitude:	4.6 Km (15,000 ft)

Lasers

The following products are Class 1 Laser Products.

Laser Klasse 1:

- The 10-GbE X2-SC SR transceiver
- The 10-GbE X2-SC LR transceiver
- The 10-GbE X2-SC ER transceiver

The transceivers complies with IEC 825-2: 1993.

Optical Power Specifications

ProCurve 10-GbE X2-SC SR optic (J8436A)

Transmitter Optical Characteristics:

Parameter	Minimum	Typical	Maximum	Notes
Average Launch Power	3dBm		-1.0dBm	
Extinction Ratio	3dB			
Nominal Wavelength	840nm	850nm	860nm	

Receiver Optical Characteristics:

Parameter	Minimum	Typical	Maximum	Notes
Center Wavelength	840nm	850nm	860nm	
Average Receiver Power			-1.0dBm	

ProCurve 10-GbE X2-SC LR optic (J8437A)

Transmitter Optical Characteristics:

Parameter	Minimum	Typical	Maximum	Notes
Average Launch Power	-8.2dBm		.5dBm	
Extinction Ratio	3.5dB	8dB		
Nominal Wavelength	1260nm	1310nm	1355nm	
Spectral Width			0.2Nm	

Receiver Optical Characteristics:

Parameter	Minimum	Typical	Maximum	Notes
Receiver Sensitivity	-12.6dBm			
Center Wavelength	1260nm	1310nm	1355nm	
LOS Detect Asserted			-30dBm	
Average Receiver Power	- 14.4		+ .5dBm	

ProCurve 10-GbE X2-SC ER optic (J8438A)

Transmitter Optical Characteristics:

Parameter	Minimum	Typical	Maximum	Notes
Average Launch Power	-4.7dBm		4.0dBm	
Nominal Wavelength	1530nm	1550nm	1565nm	

Receiver Optical Characteristics:

Parameter	Minimum	Typical	Maximum	Notes
Receiver Sensitivity			-14.1dBm	
Center Wavelength	1530nm	1550nm	1565nm	

ProCurve 10-GbE X2-CX4 Transceiver (J8440A)

Copper Transceiver Characteristics:

Parameter	Minimum	Typical	Maximum	Notes
Supply Voltage 3.3V	3.13VDC	3.3VDC	4.37VDC	
Supply Current 3.3V		196mA	216mA	
Impedance		100ohms		Differential
Transmit Voltage	800mVpp	1472mVpp	1600mVpp	
Receive Voltage	100mVpp		1600mVpp	
Rise Time	60ps		130ps	20%-80%

EMC Regulatory Statements

U.S.A.

FCC Class A

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. Operation of this equipment in a residential area may cause interference in which case the user will be required to correct the interference at his own expense.

Canada

This product complies with Class A Canadian EMC requirements.

Australia/New Zealand



This product complies with Australia/New Zealand EMC Class A requirements.

Japan

VCCI Class A

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Korea

사용자 안내문 : A 급기기

이 기기는 업무용으로 전자파 적합등록을 받은 기기 이오니, 판매자 또는 사용자는 이점을 주의하시기 바라며, 만약 잘못 구입하셨을 때에는 구입한 곳에서 비업무용으로 교환하시기 바랍니다.

Taiwan

警告使用者：這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

European Community Declaration of Conformity

These products are designed for operation with the ProCurve switches that have y1 module slots. Please see the Declarations of Conformity included in the Installation Guides for those products.

Waste Electrical and Electronic Equipment (WEEE) Statements



Disposal of Waste Equipment by Users in Private Household in the European Union

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



Likvidace zařízení soukromými domácími uživateli v Evropské unii

Tento symbol na produktu nebo balení označuje výrobek, který nesmí být vyhozen spolu s ostatním domácím odpadem. Povinností uživatele je předat takto označený odpad na předem určené sběrné místo pro recyklaci elektrických a elektronických zařízení. Okamžité třídění a recyklace odpadu pomůže uchovat přírodní prostředí a zajistí takový způsob recyklace, který ochrání zdraví a životní prostředí člověka. Další informace o možnostech odevzdání odpadu k recyklaci získáte na příslušném obecním nebo městském úřadě, od firmy zabývající se sběrem a svozem odpadu nebo v obchodě, kde jste produkt zakoupili.



Bortskaffelse af affald fra husstande i den Europæiske Union

Hvis produktet eller dets emballage er forsynet med dette symbol, angiver det, at produktet ikke må bortskaffes med andet almindeligt husholdningsaffald. I stedet er det dit ansvar at bortskaffe kasseret udstyr ved at aflevere det på den kommunale genbrugsstation, der forestår genvinding af kasseret elektrisk og elektronisk udstyr. Den centrale modtagelse og genvinding af kasseret udstyr i forbindelse med bortskaffelsen bidrager til bevarelse af naturlige ressourcer og sikrer, at udstyret genvindes på en måde, der beskytter både mennesker og miljø. Yderligere oplysninger om, hvor du kan aflevere kasseret udstyr til genvinding, kan du få hos kommunen, den lokale genbrugsstation eller i den butik, hvor du købte produktet.



Seadmete jäätmete kõrvaldamine eramajapidamistes Euroopa Liidus

See tootel või selle pakendil olev sümbol näitab, et kõnealust toodet ei tohi koos teiste majapidamisjäätmetega kõrvaldada. Teie kohus on oma seadmete jäätmed kõrvaldada, viies need elektri- ja elektroonikaseadmete jäätmete ringlussevõtmiseks selleks ettenähtud kogumispunkti. Seadmete jäätmete eraldi kogumine ja ringlussevõtmise kõrvaldamise ajal aitab kaitsta loodusvarasid ning tagada, et ringlussevõtmise toimub viisil, mis kaitseb inimeste tervist ning keskkonda. Lisateabe saamiseks selle kohta, kuhu oma seadmete jäätmed ringlussevõtmiseks viia, võtke palun ühendust oma kohaliku linnakantselei, majapidamisjäätmete kõrvaldamise teenistuse või kauplusega, kust Te toote ostsite.



Laitteiden hävittäminen kotitalouksissa Euroopan unionin alueella

Jos tuotteessa tai sen pakkauksessa on tämä merkki, tuotetta ei saa hävittää kotitalousjätteiden mukana. Tällöin hävitettävä laite on toimitettava sähkölaitteiden ja elektronisten laitteiden kierrätyspisteeseen. Hävitettävien laitteiden erillinen käsittely ja kierrätys auttavat säästämään luonnonvaroja ja varmistamaan, että laite kierrätetään tavalla, joka estää terveyshaitat ja suojelee luontoa. Lisätietoja paikoista, joihin hävitettävät laitteet voi toimittaa kierrätettäväksi, saa ottamalla yhteyttä jätehuoltoon tai liikkeeseen, josta tuote on ostettu.



Élimination des appareils mis au rebut par les ménages dans l'Union européenne

Le symbole apposé sur ce produit ou sur son emballage indique que ce produit ne doit pas être jeté avec les déchets ménagers ordinaires. Il est de votre responsabilité de mettre au rebut vos appareils en les déposant dans les centres de collecte publique désignés pour le recyclage des équipements électriques et électroniques. La collecte et le recyclage de vos appareils mis au rebut indépendamment du reste des déchets contribue à la préservation des ressources naturelles et garantit que ces appareils seront recyclés dans le respect de la santé humaine et de l'environnement. Pour obtenir plus d'informations sur les centres de collecte et de recyclage des appareils mis au rebut, veuillez contacter les autorités locales de votre région, les services de collecte des ordures ménagères ou le magasin dans lequel vous avez acheté ce produit.



Entsorgung von Altgeräten aus privaten Haushalten in der EU

Das Symbol auf dem Produkt oder seiner Verpackung weist darauf hin, dass das Produkt nicht über den normalen Hausmüll entsorgt werden darf. Benutzer sind verpflichtet, die Altgeräte an einer Rücknahmestelle für Elektro- und Elektronik-Altgeräte abzugeben. Die getrennte Sammlung und ordnungsgemäße Entsorgung Ihrer Altgeräte trägt zur Erhaltung der natürlichen Ressourcen bei und garantiert eine Wiederverwertung, die die Gesundheit des Menschen und die Umwelt schützt. Informationen dazu, wo Sie Rücknahmestellen für Ihre Altgeräte finden, erhalten Sie bei Ihrer Stadtverwaltung, den örtlichen Müllentsorgungsbetrieben oder im Geschäft, in dem Sie das Gerät erworben haben



Απορριψη άχρηστου εξοπλισμού από χρήστες σε ιδιωτικά νοικοκυριά στην Ευρωπαϊκή Ένωση

Το σύμβολο αυτό στο προϊόν ή τη συσκευασία του υποδεικνύει ότι το συγκεκριμένο προϊόν δεν πρέπει να διατίθεται μαζί με τα άλλα οικιακά σας απορρίμματα. Αντίθετα, είναι δική σας ευθύνη να ανακύκλωση άχρηστο ηλεκτρικού και ηλεκτρονικού εξοπλισμού. Η ξεχωριστή συλλογή και ανακύκλωση του άχρηστου εξοπλισμού σας κατά την απόρριψη θα συμβάλει στη διατήρηση των φυσικών πόρων και θα διασφαλίσει ότι η ανακύκλωση γίνεται με τρόπο που προστατεύει την ανθρώπινη υγεία και το περιβάλλον. Για περισσότερες πληροφορίες σχετικά με το πού μπορείτε να παραδώσετε τον άχρηστο εξοπλισμό σας για ανακύκλωση, επικοινωνήστε με το αρμόδιο τοπικό γραφείο, την τοπική υπηρεσία διάθεσης οικιακών απορριμμάτων ή το κατάστημα όπου αγοράσατε το προϊόν.



Készülékek magánháztartásban történő selejtezése az Európai Unió területén

A készüléken, illetve a készülék csomagolásán látható azonos szimbólum annak jelzésére szolgál, hogy a készülék a selejtezés során az egyéb háztartási hulladéktól eltérő módon kezelendő. A vásárló a hulladékká vált készüléket köteles a kijelölt gyűjtőhelyre szállítani az elektromos és elektronikai készülékek újrahasznosítása céljából. A hulladékká vált készülékek selejtezőskori begyűjtése és újrahasznosítása hozzájárul a természeti erőforrások megőrzéséhez, valamint biztosítja a selejtezett termékek környezetre és emberi egészségre nézve biztonságos feldolgozását. A begyűjtés pontos helyéről bővebb tájékoztatást a lakhelye szerint illetékes önkormányzattól, az illetékes személtakarító vállalatától, illetve a terméket elárúsító helyen kaphat.



Smaltimento delle apparecchiature da parte di privati nel territorio dell'Unione Europea

Questo simbolo presente sul prodotto o sulla sua confezione indica che il prodotto non può essere smaltito insieme ai rifiuti domestici. È responsabilità dell'utente smaltire le apparecchiature consegnandole presso un punto di raccolta designato al riciclo e allo smaltimento di apparecchiature elettriche ed elettroniche. La raccolta differenziata e il corretto riciclo delle apparecchiature da smaltire permette di proteggere la salute degli individui e l'ecosistema. Per ulteriori informazioni relative ai punti di raccolta delle apparecchiature, contattare l'ente locale per lo smaltimento dei rifiuti, oppure il negozio presso il quale è stato acquistato il prodotto.



Nolietotu iekārtu iznīcināšanas noteikumi lietotājiem Eiropas Savienības privātajās mājāsaimniecībās

Šāds simbols uz izstrādājuma vai uz tā iesaiņojuma norāda, ka šo izstrādājumu nedrīkst izmest kopā ar citiem sadzīves atkritumiem. Jūs atbildat par to, lai nolietotās iekārtas tiktu nodotas speciāli iekārtotos punktos, kas paredzēti izmantoto elektrisko un elektronisko iekārtu savākšanai otrreizējai pārstrādei. Atsevišķa nolietotu iekārtu savākšana un otrreizējā pārstrāde palīdzēs saglabāt dabas resursus un garantēs, ka šīs iekārtas tiks otrreizēji pārstrādātas tādā veidā, lai pasargātu vidi un cilvēku veselību. Lai uzzinātu, kur nolietotās iekārtas var izmest otrreizējai pārstrādei, jāvērsas savas dzīves vietas pašvaldībā, sadzīves atkritumu savākšanas dienestā vai veikalā, kurā izstrādājums tika nopirkts.



Vartotojū iš privačių namų ūkių įrangos atliekų šalinimas Europos Sąjungoje

Šis simbolis ant gaminio arba jo pakuotės rodo, kad šio gaminio šalinti kartu su kitomis namų ūkio atliekomis negalima. Šalintinas įrangos atliekas privalote pristatyti į specialią surinkimo vietą elektros ir elektroninės įrangos atliekoms perdirbti. Atskirai surenkamos ir perdirbamos šalintinos įrangos atliekos padės saugoti gamtinius išteklius ir užtikrinti, kad jos bus perdirbtos tokiu būdu, kuris nekenkia žmonių sveikatai ir aplinkai. Jeigu norite sužinoti daugiau apie tai, kur galima pristatyti perdirbtinas įrangos atliekas, kreipkitės į savo seniūniją, namų ūkio atliekų šalinimo tarnybą arba parduotuvę, kurioje įsigijote gaminį.



Verwijdering van afgedankte apparatuur door privé-gebruikers in de Europese Unie

Dit symbool op het product of de verpakking geeft aan dat dit product niet mag worden gedeponeerd bij het normale huishoudelijke afval. U bent zelf verantwoordelijk voor het inleveren van uw afgedankte apparatuur bij een inzamelingspunt voor het recyclen van oude elektrische en elektronische apparatuur. Door uw oude apparatuur apart aan te bieden en te recyclen, kunnen natuurlijke bronnen worden behouden en kan het materiaal worden hergebruikt op een manier waarmee de volksgezondheid en het milieu worden beschermd. Neem contact op met uw gemeente, het afvalinzamelingsbedrijf of de winkel waar u het product hebt gekocht voor meer informatie over inzamelingspunten waar u oude apparatuur kunt aanbieden voor recycling.



Pozbywanie się zużytego sprzętu przez użytkowników w prywatnych gospodarstwach domowych w Unii Europejskiej

Ten symbol na produkcie lub jego opakowaniu oznacza, że produktu nie wolno wyrzucać do zwykłych pojemników na śmieci. Obowiązkiem użytkownika jest przekazanie zużytego sprzętu do wyznaczonego punktu zbiórki w celu recyklingu odpadów powstałych ze sprzętu elektrycznego i elektronicznego. Osobna zbiórka oraz recykling zużytego sprzętu pomogą w ochronie zasobów naturalnych i zapewnią ponowne wprowadzenie go do obiegu w sposób chroniący zdrowie człowieka i środowisko. Aby uzyskać więcej informacji o tym, gdzie można przekazać zużyty sprzęt do recyklingu, należy się skontaktować z urzędem miasta, zakładem gospodarki odpadami lub sklepem, w którym zakupiono produkt.

**Descarte de Lixo Elétrico na Comunidade Européia**

Este símbolo encontrado no produto ou na embalagem indica que o produto não deve ser descartado no lixo doméstico comum. É responsabilidade do cliente descartar o material usado (lixo elétrico), encaminhando-o para um ponto de coleta para reciclagem. A coleta e a reciclagem seletivas desse tipo de lixo ajudarão a conservar as reservas naturais; sendo assim, a reciclagem será feita de uma forma segura, protegendo o ambiente e a saúde das pessoas. Para obter mais informações sobre locais que reciclam esse tipo de material, entre em contato com o escritório da HP em sua cidade, com o serviço de coleta de lixo ou com a loja em que o produto foi adquirido.

**Likvidácia vyradených zariadení v domácnostiach v Európskej únii**

Symbol na výrobku alebo jeho balení označuje, že daný výrobok sa nesmie likvidovať s domovým odpadom. Povinnosťou spotrebiteľa je odovzdať vyradené zariadenie v zbernom mieste, ktoré je určené na recykláciu vyradených elektrických a elektronických zariadení. Separovaný zber a recyklácia vyradených zariadení prispieva k ochrane prírodných zdrojov a zabezpečuje, že recyklácia sa vykonáva spôsobom chrániacim ľudské zdravie a životné prostredie. Informácie o zberných miestach na recykláciu vyradených zariadení vám poskytne miestne zastupiteľstvo, spoločnosť zabezpečujúca odvoz domového odpadu alebo obchod, v ktorom ste si výrobok zakúpili.

**Odstranjevanje odslužene opreme uporabnikov v zasebnih gospodinjstvih v Evropski uniji**

Ta znak na izdelku ali njegovi embalaži pomeni, da izdelka ne smete odvreči med gospodinjске odpadke. Nasprotno, odsluženo opremo morate predati na zbirališče, pooblaščeno za recikliranje odslužene električne in elektronske opreme. Ločeno zbiranje in recikliranje odslužene opreme prispeva k ohranjanju naravnih virov in zagotavlja recikliranje te opreme na zdravju in okolju neškodljiv način. Za podrobnejše informacije o tem, kam lahko odpeljete odsluženo opremo na recikliranje, se obrnite na pristojni organ, komunalno službo ali trgovino, kjer ste izdelek kupili.

**Eliminación de residuos de equipos eléctricos y electrónicos por parte de usuarios particulares en la Unión Europea**

Este símbolo en el producto o en su envase indica que no debe eliminarse junto con los desperdicios generales de la casa. Es responsabilidad del usuario eliminar los residuos de este tipo depositándolos en un "punto limpio" para el reciclado de residuos eléctricos y electrónicos. La recogida y el reciclado selectivos de los residuos de aparatos eléctricos en el momento de su eliminación contribuirá a conservar los recursos naturales y a garantizar el reciclado de estos residuos de forma que se proteja el medio ambiente y la salud. Para obtener más información sobre los puntos de recogida de residuos eléctricos y electrónicos para reciclado, póngase en contacto con su ayuntamiento, con el servicio de eliminación de residuos domésticos o con el establecimiento en el que adquirió el producto.

**Bortskaffande av avfallsprodukter från användare i privathushåll inom Europeiska Unionen**

Om den här symbolen visas på produkten eller förpackningen betyder det att produkten inte får slängas på samma ställe som hushållssopor. I stället är det ditt ansvar att bortskaffa avfallet genom att överlämna det till ett uppsamlingsställe avsett för återvinning av avfall från elektriska och elektroniska produkter. Separat insamling och återvinning av avfallet hjälper till att spara på våra naturresurser och gör att avfallet återvinns på ett sätt som skyddar människors hälsa och miljön. Kontakta ditt lokala kommunkontor, din närmsta återvinningsstation för hushållsavfall eller affären där du köpte produkten för att få mer information om var du kan lämna ditt avfall för återvinning.



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