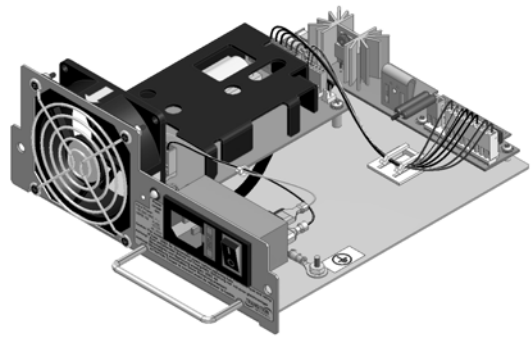


# User Guide

## CPSMP-205

110 – 240 VAC Power Supply Module:

- PointSystem™
- CPSMC1800-200 Accessory
- CPSMC1900-100 Accessory



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## Description

Transition Networks' CPSMP-205 AC power supply can deliver power or provide optional, redundant AC power to the CPSMC1800-200 and the CPSMC1900-100 PointSystem chassis.

## Cautions and Warnings

### ***Definitions***



CAUTIONS indicate potential damage to equipment.



Warnings indicate potential hazard or injury to people.

### **Cautions and warnings in this manual**

Cautions and Warnings are explained here and placed throughout this manual where appropriate.



**CAUTION:** While installing or servicing the power supply, wear a grounding device and observe all electrostatic discharge precautions. Failure to observe this caution could result in damage or failure of the power supply.



**WARNING:** Do not connect the power supply to an external power source before installing it into the chassis. Failure to observe this warning could result in an electrical shock, even death.



**WARNING:** A readily accessible, suitable National Electrical Code (NEC) or local electrical code approved disconnect device and branch-circuit protector must be part of the building's installed wiring. Failure to observe this warning could result in an electric shock, even death.

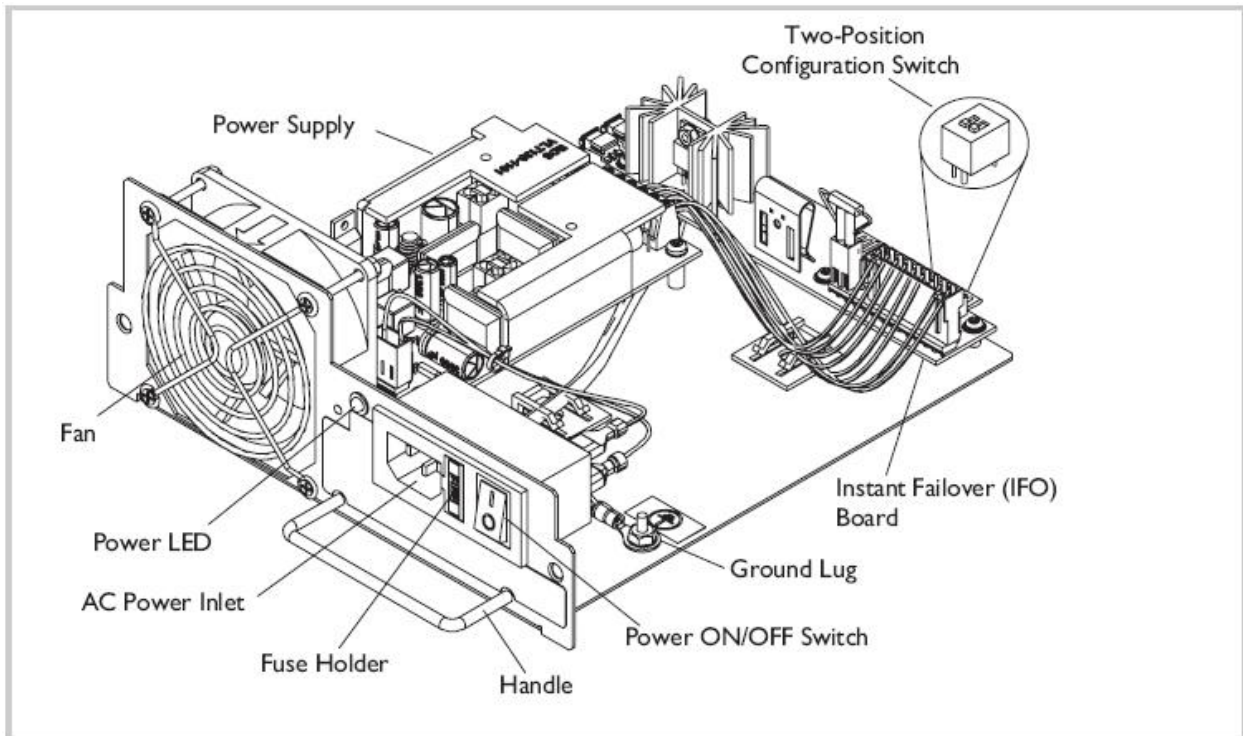


**WARNING:** Turn the power supply and external power source OFF and ensure that the power supply is disconnected from the external power source before performing any maintenance. Failure to observe this warning could result in an electrical shock, even death.

## Power supply component identification

See Figure 1 below:

- Fuse Holder (*fuse inline AC*)
- Instant failover board (switches to redundant (*second*) power supply instantly)
- Two-position configuration switch sets power-supply functionality
- Power Supply
- Power ON LED (*lit when power is ON*)
- ON/OFF switch, when in the ON position power is supplied to the PointSystem chassis
- Handle for installing and removing the power supply
- Fan (exhausts warm air from the power supply)
- AC power inlet (*receptacle for external AC power*)



**Figure 1: Power Supply Components**

## Notices

- The CPSMP-205 AC power supply must be installed by qualified technical personnel only. Transition Networks assumes no responsibility for the improper installation, set up, or use of this power supply.
- The information in this user's guide is subject to change. For the most up-to-date information, see this same user's guide online at [www.transition.com](http://www.transition.com).

## Installation

### IMPORTANT

- All installation and service must be performed by qualified personnel only.
- Read, understand, and follow all CAUTIONS and WARNING notices, instructions marked on the product, including this manual.

The CPSMP-205 AC power supply can replace an existing AC power supply. Either can be installed as the redundant power supply in an AC or DC powered Point System chassis.

**⚠ CAUTION:** While installing or servicing the power supply, wear a grounding device and observe all electrostatic discharge precautions. Failure to observe this caution could result in damage or failure of the power supply.

### Configuration switch

The power supply contains a two-position configuration switch, shown in Figure 2 below.

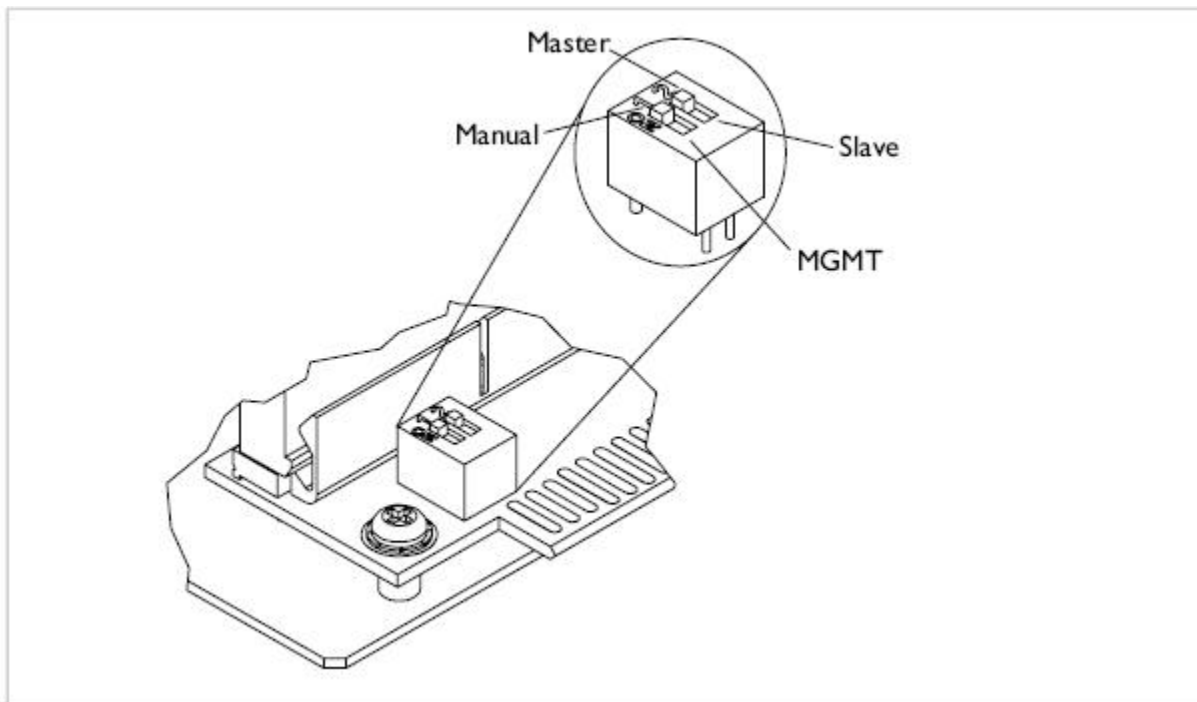


Figure 2: Two-Position Configuration Switch

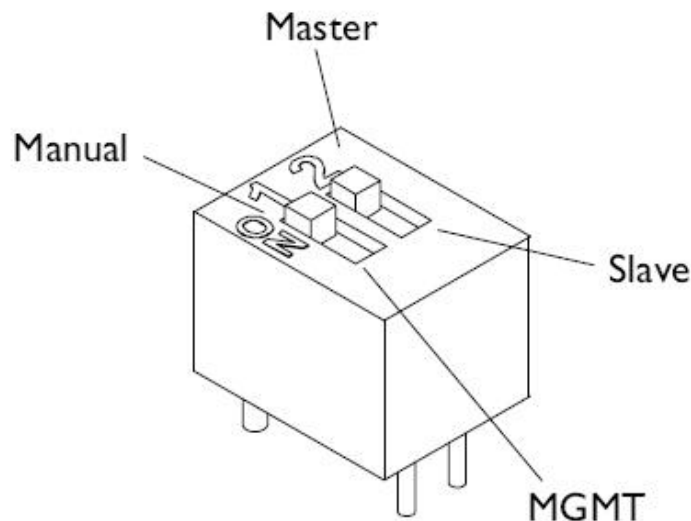
## Two-position configuration switch explanation

The two-position configuration switch establishes PointSystem software or manual control of the power supply.

- When the configuration switch is in the management position, the power supply configuration can be set to master or slave via software.
- When the configuration switch is in the manual position, the power-supply configuration is set manually to master or slave and cannot be changed via software.
- When the configuration switch is in the master position, the power supply is the primary power source for the chassis.
- When the configuration switch is in the slave position (*additional power supply*), the power supply is used for redundancy (*failover*) purposes, in the event of a master power-supply failure.

## Configuring two power supplies in one chassis

To set up power supply redundancy, set one power supply to master that supplies power to the entire chassis, and the other to slave for redundancy. In this mode, the slave power supply is in stand-by mode and takes over in the event of a master (*primary*) power-supply failure. See Figure 3 below.



**Figure 3: Two-Position Configuration Switch**

### IMPORTANT:

- In a chassis with multiple power supplies, one power supply must be set to master. If both modules are set to slave neither will supply sufficient power to the chassis.
- Power supply load sharing (*configuring two supplies as masters for load sharing in a chassis*) is not recommended due to its unbalanced level of load sharing.

## Installing an optional power supply into the chassis



**WARNING:** Do not connect the power supply to an external power source before installing it into the chassis. Failure to observe this warning could result in an electrical shock, even death.

**Note:** The power supply module can be hot swapped (i.e., swapped while the chassis is in operation) provided the power supply's ON/OFF switch is in the OFF position, and it has been disconnected from its external power source.

To install the power supply in either the CPSMC1800-200 or the CPSMC1900-100 PointSystem chassis, do the following:

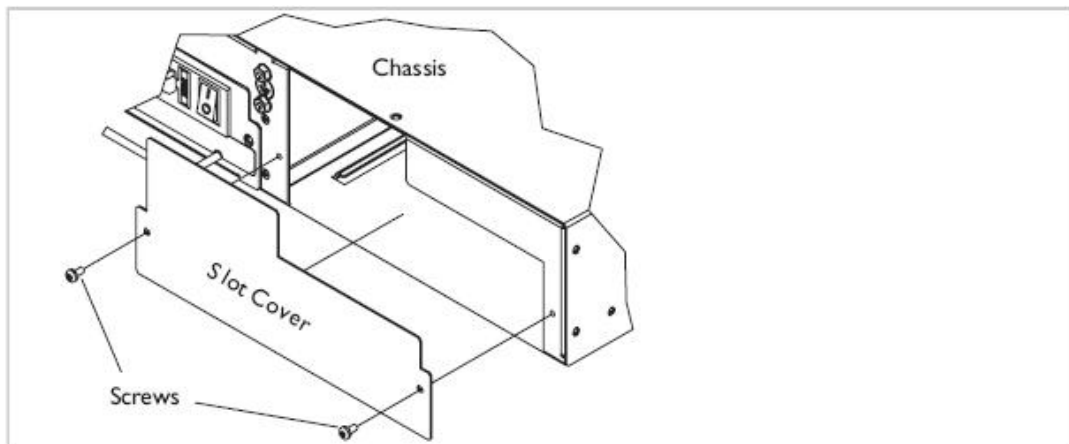
**Note:** The procedure is the same for installing the power supply into either slot.

1. Push the power supply ON/OFF switch to the OFF position. See Figure 4 below.



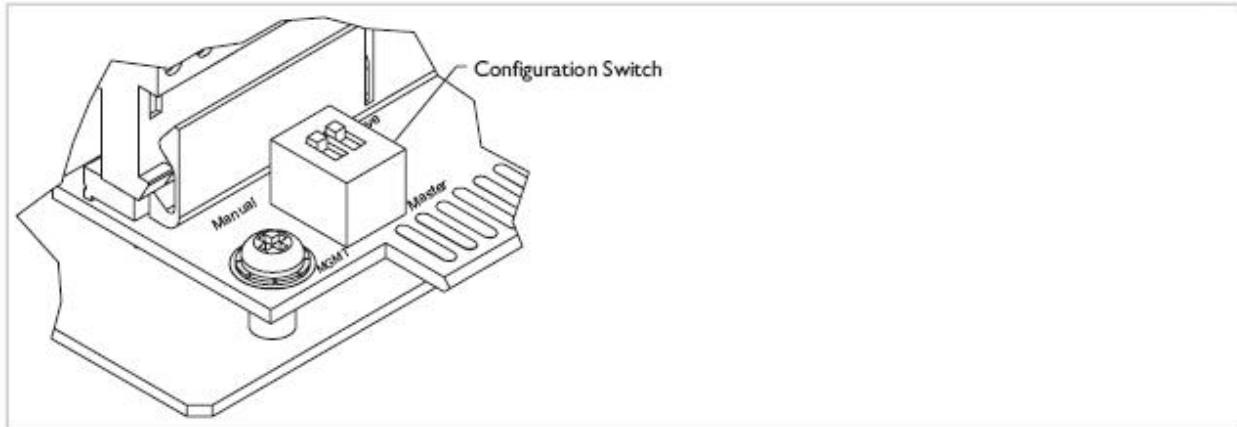
**Figure 4: Power ON/OFF Switch**

2. Remove the slot cover from the chassis and maintain the two screws. See Figure 5 below.



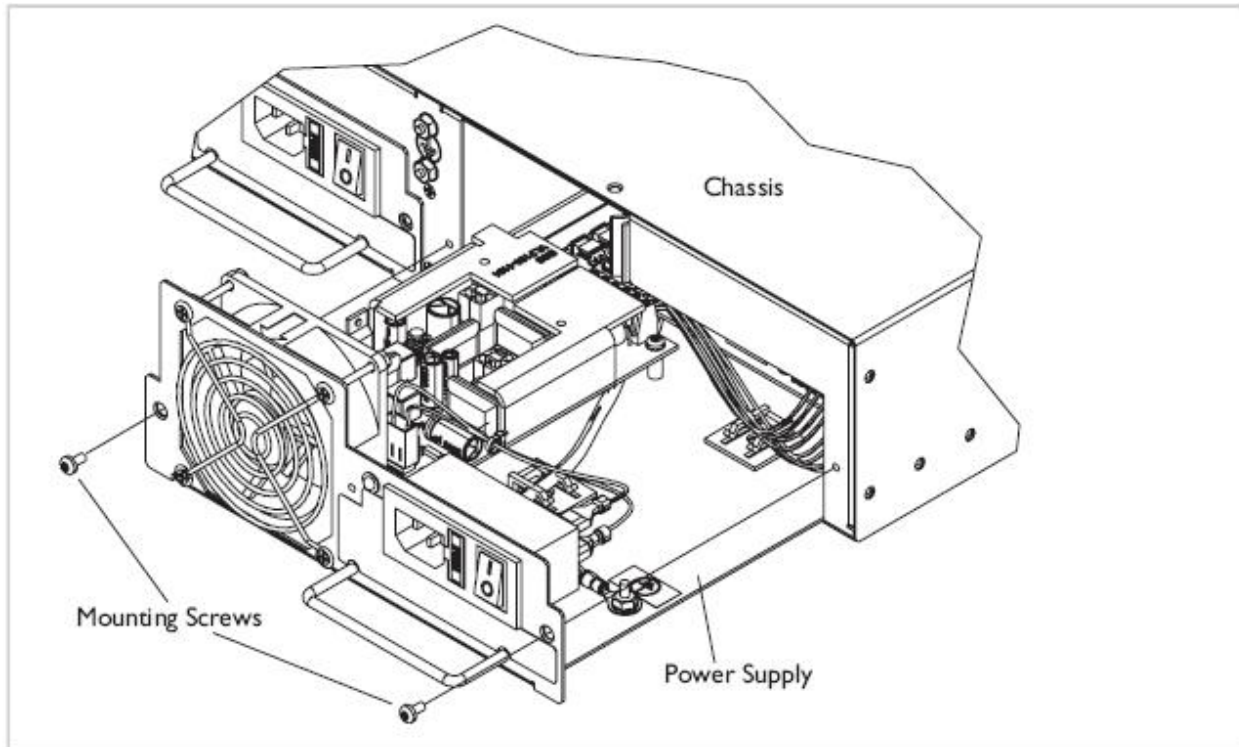
**Figure 5: Chassis Slot Cover**

3. Set the configuration switch (master/slave/management/manual), if necessary. See Figure 6 below.



**Figure 6: Two-Position Configuration Switch**

4. Position the power supply at the chassis slot. See Figure 7 below.



**Figure 7: Power Supply Installation**

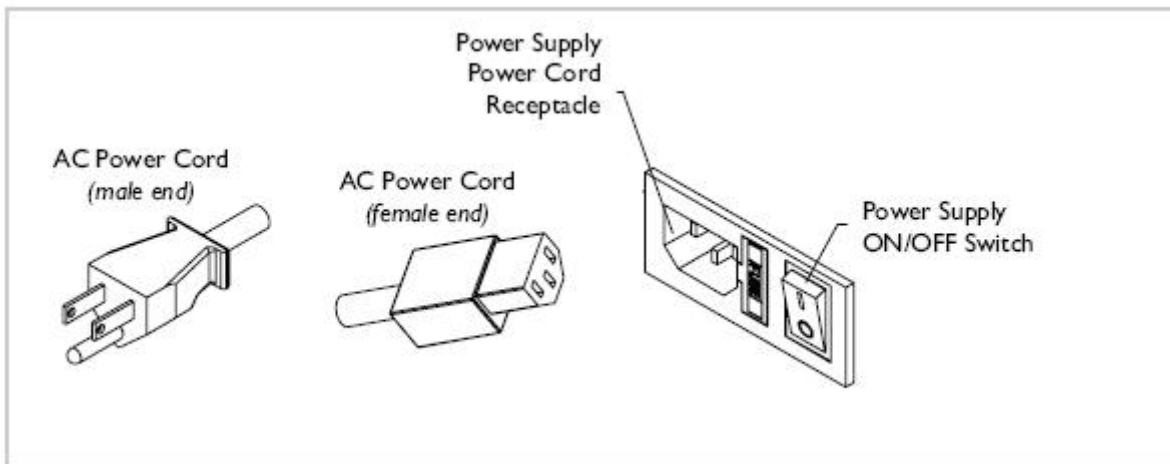
5. Slide the power supply completely into the chassis.
6. Insert the two screws shown in Figure 7 to mount the power supply to the chassis.

## Connecting power supply to external power

**⚠ CAUTION:** Ensure that the ON/OFF switch on the power supply module is set to “**0**” when connecting to the external power source. Failure to observe this caution could result in damage to, and subsequent failure of, the power supply module.

To connect the CPSMP-205 to external power:

1. Set the ON/OFF switch on the power supply module to “**0**”.
2. Connect the female end of the AC power cord to the male end of the AC power connector.
3. Connect the male end of the AC power cord into the correct voltage AC rack or wall socket.
4. Set the ON/OFF switch on the power supply module to “**I**”.
5. Verify that the CPSMP-205 power supply module is powered ON by observing fan rotation and the illuminated power LED.



**Figure 8: Connecting Power**

**Note:** The CPSMP-205 AC power supply can be used to replace or as a redundant power supply for the following:

- CPSMP-200
- CPSMP-210
- CPSMP-205



## Maintenance

### *Replacing the CPSMP-205 power supply*

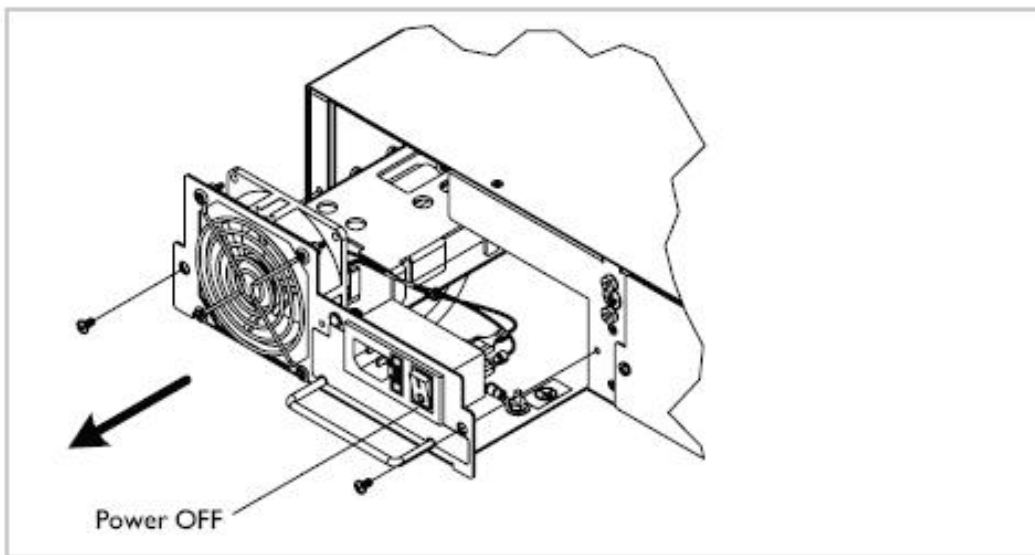


**WARNING:** Do not connect the power supply module to the external power source before installing it into the chassis. Failure to observe this caution could result in equipment damage, personal injury or death.

**Note:** The CPSMP-205 power supply module may be “hot swapped” (i.e., replaced while the chassis is in operation) provided the module to be replaced has been disconnected from its external power source and the ON/OFF switch set to “0.”

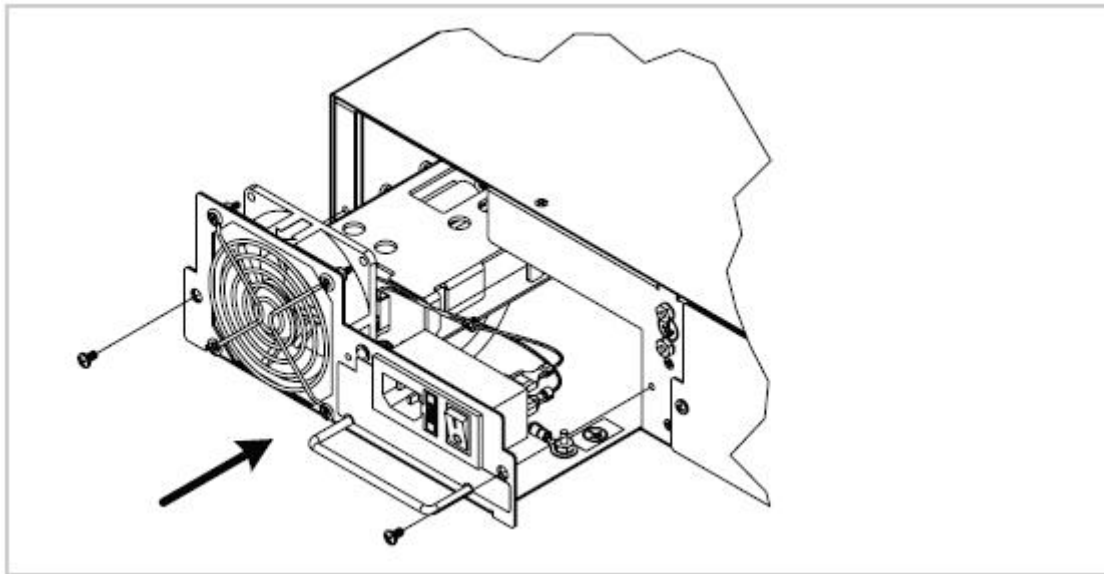
To replace the CPSMP-205 power supply module:

1. Ensure the ON/OFF switch on the power supply module is set to “0.” See Figure 9 below.
2. Disconnect the AC power cord from the AC power source.
3. Remove the two (2) screws that secure the power supply module to the chassis. Retain the screws for installing the replacement module.
4. Carefully pull the power supply module from the chassis.



**Figure 9: Removing Power Supply**

5. Set the two-position configuration switch and on the replacement power supply module, if necessary.



**Figure 10: Power Supply Installation**

6. Ensure that the power supply module is firmly seated inside the chassis.
7. Carefully insert the two (2) retained screws through the power supply module into the chassis and tighten them.
8. Plug the power cord into the power supply and into the external power source.
9. Push the power ON/OFF switch to the ON position. Note that the fan is rotating and the power ON LED is lit.

## Replacing the fuse

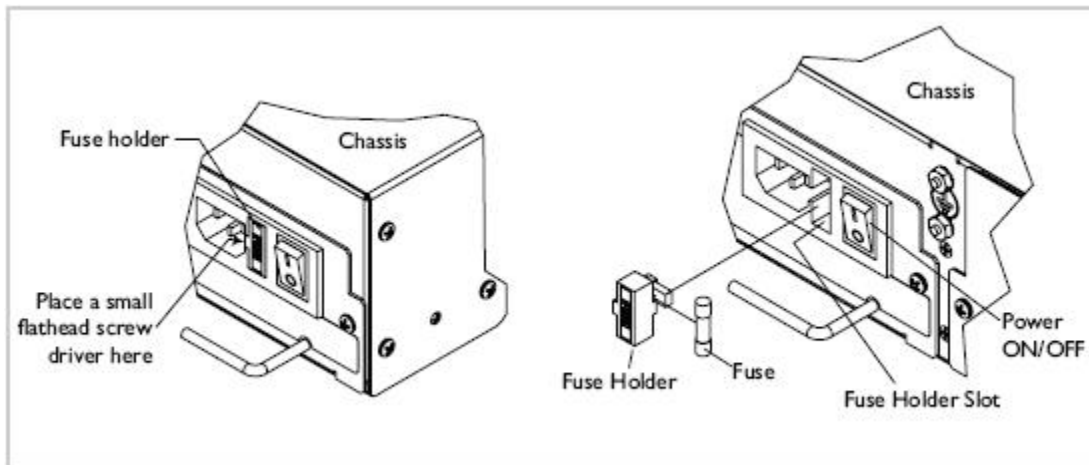
**CAUTION:** Ensure that the power supply module has been disconnected from the external power source and the module's ON/OFF switch has been set to "0".

Failure to observe this caution could result in damage to, or failure of the power supply module.

**Note:** The CPSMP-205 power supply module may be "hot swapped" (i.e., serviced while the chassis is in operation) provided the module to be serviced has been disconnected from its external power supply and the module's ON/OFF switch has been set to "0".

To replace the fuse in the CPSMP-205 power supply module:

1. Ensure the ON/OFF switch on the power supply module is set to "0" - Off.
2. Disconnect the AC power cord from the external power source.
3. From the inside edge of the power receptacle, insert a small flat blade screwdriver into the groove on the front, inside edge of the fuse holder and carefully pry the fuse holder from the power supply module. See Figure 11 below.



**Figure 11: Replacing the Fuse**

4. Carefully remove the fuse from the fuse holder.
5. Install a same size and rating (250V, 4A) replacement fuse in the fuse holder.
6. Insert the fuse holder containing the fuse into the fuse holder slot, and then push in to snap into place.
7. Insert the female end of the power cord into the power supply receptacle and the other end into the external AC power receptacle.
8. Push the power ON/OFF switch to the ON position. Note that the fan is rotating and the power ON LED is lit.

## Technical Specifications

For Transition Networks' CPSMP-205 or equivalent:

Dimensions	8.3" x 8.4" x 2.7" (211 mm x 211 mm x 69 mm)
Shipping Weight	3 lb. (1.36 kg) approximately
Power Input	100-240 V, 47/63Hz, 2.2 – 1.0 Amp. ( <i>typical with a fully-loaded chassis</i> )
Total Power Dissipation	23W Typical
Efficiency	>70%
Voltage Tolerance	± 10%
Low-Line Input Current	3.3A max.
Inrush Current	33A max. ( <i>peak starting current</i> ) @ 115VAC
Power Output	12VDC at 13.3 Amp max.
Power Factor	> 0.95 ( <i>no inductive or capacitive distinction</i> )
Fuse	4 Amp/250 V
MTBF	Greater than 35,000 hours ( <i>MIL-HDBK-217F</i> ) Greater than 98,000 hours ( <i>Bellcore7 V5.0</i> )
Operating Temperature:	0 to 60°C (32 to 140°F)
Storage Temperature:	-20 to 85°C (-4 to 185°F)
Humidity:	5 to 95%, non condensing
Warranty	Lifetime

## Troubleshooting

If the power supply module fails, isolate and correct the fault by determining the answers to the following questions and then taking the indicated action:

- Is the Power ON LED on the CPSMP-205 module lit?
  - NO
    - Is the power supply module inserted properly into the chassis?
    - Is the power supply module properly connected to the external power source?
    - Does the external power source provide power?
    - Is the fuse on the CPSMP-205 power supply intact?

See the “Replacing the fuse” section for fuse replacement procedure if necessary.
  - YES
    - Contact Tech Support: 1-800-260-1312, Int'l: 00-1-952-941-7600.

## Contact Us

### Technical support

Technical support is available 24-hours a day

US and Canada: 1-800-260-1312

International: 00-1-952-941-7600

### Transition now

Chat live via the Web with Transition Networks Technical Support.

Log onto [www.transition.com](http://www.transition.com) and click the **Transition Now** link.

### Web-based seminars

Transition Networks provides seminars via live web-based training.

Log onto [www.transition.com](http://www.transition.com) and click the **Learning Center** link.

### E-Mail

Ask a question anytime by sending an e-mail to our technical support staff.



[techsupport@transition.com](mailto:techsupport@transition.com)

### Address

Transition Networks  
 10900 Red Circle Drive  
 Minnetonka, MN 55343, U.S.A.  
 telephone: 952-941-7600  
 toll free: 800-526-9267  
 fax: 952-941-2322

## Compliance Information

### Declaration of Conformity

		<h3>Declaration of Conformity</h3>	
Name of Mfg:	<b>Transition Networks</b> 10900 Red Circle Drive, Minnetonka, MN 55343 U.S.A.		
Model:	CPSMP-205 110/240 VAC Power Supply		
Part Number(s):	CPSMP-205		
Regulation:	EMC Directive 89/336/EEC		
Purpose:	To declare that the CPSMP-205 VAC Power Supply to which this declaration refers is in conformity with the following directive(s) standard(s): EMC Directive 2004/108/EC; EN 55022:2006+A1:2007 Class A; EN55024:1998+A1:2001+A2:2003; EN61000-3-2; EN61000-3-3; CFR Title 47 Part 15 Subpart B Class A; Low Voltage Directive: 2006/95/EC; CE Mark; UL Listed		
I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).			
 Stephen Anderson, Vice-President of Engineering		July 2010 Date	

## FCC regulations

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 harmful 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 harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at the user's own expense.

## Canadian regulations

This digital apparatus does not exceed the Class A limits for radio noise for digital apparatus set out on the radio interference regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la Class A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

## Record of Revisions

Rev	Date	Notes
A	10/25/10	Initial release.
B	08/15/12	Corrected MTBF specs and updated format.

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