

▶ Redundant Power Unit

Fault-tolerant networking!

- ◆ Separate AC line cord
- ◆ Supports four switches
- ◆ Easy management LEDs
- ◆ One rack unit high



Redundant Power Unit User Guide

SMC[®]

Networks

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* SMC will provide warranty service for one year following discontinuance from the active SMC price list. Under the limited lifetime warranty, internal and external power supplies, fans, and cables are covered by a standard one-year warranty from date of purchase.

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COMPLIANCES

FCC - Class A

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. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart B of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

You may use unshielded twisted-pair (UTP) cable for RJ-45 connections—Category 3 or greater for 10 Mbps connections, Category 5 for 100 Mbps connections and Category 5, 5e, or 6 for 1000 Mbps connections. Use 50/125 or 62.5/125 micron multimode fiber optic cable, or 9/125 micron single-mode cable, for SFP transceiver connections.

- Warnings:**
1. Wear an anti-static wrist strap or take other suitable measures to prevent electrostatic discharge when handling this equipment.
 2. When connecting this switch to a power outlet, connect the field ground lead on the tri-pole power plug to a valid earth ground line to prevent electrical hazards.

Industry Canada - Class A

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled “Digital Apparatus,” ICES-003 of the Department of Communications.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe A prescrites dans la norme sur le matériel brouilleur: “Appareils Numériques,” NMB-003 édictée par le ministère des Communications.

EC Conformance Declaration - Class A

SMC contact for these products in Europe is:

SMC Networks Europe,
Edificio Conata II,
Calle Fructuós Gelabert 6-8, 2^a, 4^a,
08970 - Sant Joan Despí, Barcelona, Spain.

This information technology equipment complies with the requirements of the Council Directive 89/336/EEC on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility and 73/23/EEC for electrical equipment used within certain voltage limits and the Amendment Directive 93/68/EEC. For the evaluation of the compliance with these Directives, the following standards were applied:

- RFI Emission:
- Limit class A according to EN 55022:1998
 - Limit class A for harmonic current emission according to EN 61000-3-2/1995
 - Limitation of voltage fluctuation and flicker in low-voltage supply system according to EN 61000-3-3/1995
- Immunity:
- Product family standard according to EN 55024:1998
 - Electrostatic Discharge according to EN 61000-4-2:1995 (Contact Discharge: ± 4 kV, Air Discharge: ± 8 kV)
 - Radio-frequency electromagnetic field according to EN 61000-4-3:1996 (80 - 1000 MHz with 1 kHz AM 80% Modulation: 3 V/m)
 - Electrical fast transient/burst according to EN 61000-4-4:1995 (AC/DC power supply: ± 1 kV, Data/Signal lines: ± 0.5 kV)
 - Surge immunity test according to EN 61000-4-5:1995 (AC/DC Line to Line: ± 1 kV, AC/DC Line to Earth: ± 2 kV)
 - Immunity to conducted disturbances, Induced by radio-frequency fields: EN 61000-4-6:1996 (0.15 - 80 MHz with 1 kHz AM 80% Modulation: 3 V/m)
 - Power frequency magnetic field immunity test according to EN 61000-4-8:1993 (1 A/m at frequency 50 Hz)
 - Voltage dips, short interruptions and voltage variations immunity test according to EN 61000-4-11:1994 (>95% Reduction @10 ms, 30% Reduction @500 ms, >95% Reduction @5000 ms)
- LVD:
- EN 60950 (A1/1992; A2/1993; A3/1993; A4/1995; A11/1997)

Warning: Do not plug a phone jack connector in the RJ-45 port. This may damage this device. Les raccordeurs ne sont pas utilisés pour le système téléphonique!

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。

Australia AS/NZS 3548 (1995) - Class A



ACN 069 351 613

SMC contact for products in Australia is:

SMC-Australia
L9, 123 Epping Rd,
North Ryde, NSW Australia
Phone: 61-2-88757887
Fax: 61-2-88757777

Safety Compliance

Wichtige Sicherheitshinweise (Germany)

1. Bitte lesen Sie diese Hinweise sorgfältig durch.
2. Heben Sie diese Anleitung für den späteren Gebrauch auf.
3. Vor jedem Reinigen ist das Gerät vom Stromnetz zu trennen. Verwenden Sie keine Flüssigoder Aerosolreiniger. Am besten eignet sich ein angefeuchtetes Tuch zur Reinigung.
4. Die Netzanschlussteckdose soll nahe dem Gerät angebracht und leicht zugänglich sein.
5. Das Gerät ist vor Feuchtigkeit zu schützen.
6. Bei der Aufstellung des Gerätes ist auf sicheren Stand zu achten. Ein Kippen oder Fallen könnte Beschädigungen hervorrufen.
7. Die Belüftungsöffnungen dienen der Luftzirkulation, die das Gerät vor Überhitzung schützt. Sorgen Sie dafür, daß diese Öffnungen nicht abgedeckt werden.
8. Beachten Sie beim Anschluß an das Stromnetz die Anschlußwerte.
9. Verlegen Sie die Netzanschlußleitung so, daß niemand darüber fallen kann. Es sollte auch nichts auf der Leitung abgestellt werden.
10. Alle Hinweise und Warnungen, die sich am Gerät befinden, sind zu beachten.
11. Wird das Gerät über einen längeren Zeitraum nicht benutzt, sollten Sie es vom Stromnetz trennen. Somit wird im Falle einer Überspannung eine Beschädigung vermieden.
12. Durch die Lüftungsöffnungen dürfen niemals Gegenstände oder Flüssigkeiten in das Gerät gelangen. Dies könnte einen Brand bzw. elektrischen Schlag auslösen.
13. Öffnen sie niemals das Gerät. Das Gerät darf aus Gründen der elektrischen Sicherheit nur von autorisiertem Servicepersonal geöffnet werden.
14. Wenn folgende Situationen auftreten ist das Gerät vom Stromnetz zu trennen und von einer qualifizierten Servicestelle zu überprüfen:
 - a. Netzkabel oder Netzstecker sind beschädigt.
 - b. Flüssigkeit ist in das Gerät eingedrungen.
 - c. Das Gerät war Feuchtigkeit ausgesetzt.
 - d. Wenn das Gerät nicht der Bedienungsanleitung entsprechend funktioniert oder Sie mit Hilfe dieser Anleitung keine Verbesserung erzielen.
 - e. Das Gerät ist gefallen und/oder das Gehäuse ist beschädigt.
 - f. Wenn das Gerät deutliche Anzeichen eines Defektes aufweist.
15. Zum Netzanschluß dieses Gerätes ist eine geprüfte Leitung zu verwenden. Für einen Nennstrom bis 6 A und einem Gerätegewicht größer 3 kg ist eine Leitung nicht leichter als H05VV-F, 3G, 0.75 mm² einzusetzen.

Der arbeitsplatzbezogene Schalldruckpegel nach DIN 45 635 Teil 1000 beträgt 70 dB(A) oder weniger.

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ABOUT THE REDUNDANT POWER UNIT

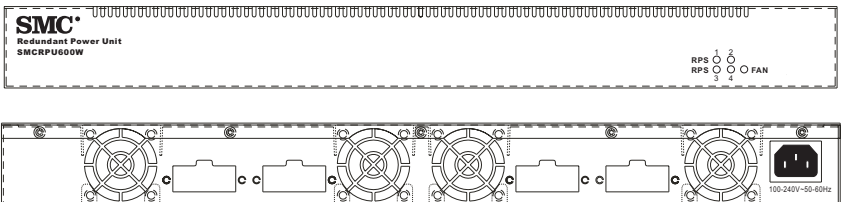
SMC's Redundant Power Unit (RPU), SMC RPU600W, can supply 600 Watts of backup power to four SMC device (hubs or switches) in the event of an AC loss or failure of an internal power supply. Please check with SMC for information on the devices supported by this RPU.

Features and Benefits

- Supports four SMC devices with 12V DC output
- Easy management LEDs located on the front panel
- AC line cord can draw power from a different supply circuit
- DC line cord provides backup power to the attached device

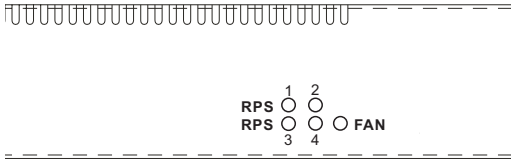
Front and Rear Panels

Four Power and one Fan indicators are located on the RPU's front panel. While the AC supply and DC backup receptacles are located on the RPU's rear panel.



ABOUT THE REDUNDANT POWER UNIT

LEDs



LED	Status	Description
RPS	On Green	Power is being supplied to the RPU, normally operation, and connected to switch.
	Flashing	Power is being supplied to the RPU and normally operation, but no connection to the switch.
	Off	Power is off or failure occurred.
FAN	On Green	Fan is working normally.
	Flashing	One or more fans occurred failure.
	Off	Fan is off.

INSTALLING THE RPU

The RPU may be placed on a desktop or mounted in a rack.

Caution: Warning: DO NOT place the RPU on the floor as the case is not waterproof.

RPU Packing List

- Redundant Power Unit — provides backup power to four SMC devices
- One AC Supply Power Cord — US, Continental Europe or UK
- One DC Backup Power Cord — with IEC connectors on both ends
- Rack Mounting Kit — brackets and screws
- Star-head screwdriver
- This User Guide
- Warranty Registration Card — be sure to complete and return to SMC

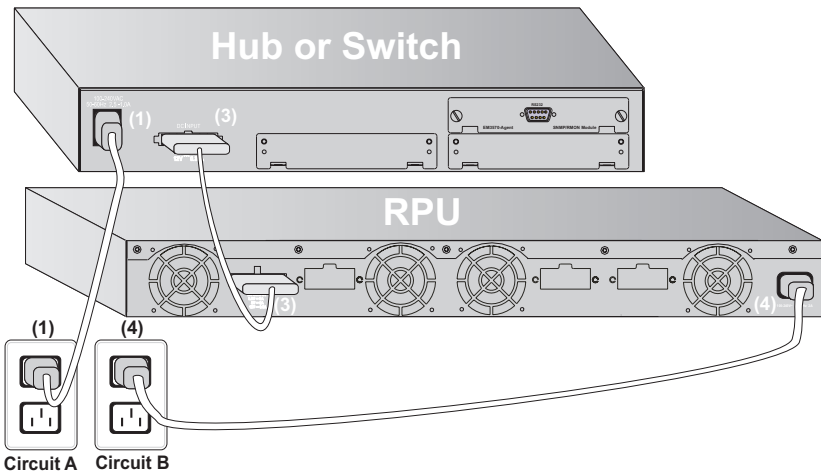
Desktop or Rack Mounting

You can set the RPU on a desktop or flat surface near a separate AC power source and close to the device to which it is to supply power. To mount the RPU in a standard EIA 19-inch rack, use the brackets and screws supplied with the RPU. Use a cross-head screwdriver to attach the brackets to the side of the switch. Position the RPU in the rack by lining up the holes in the brackets with the appropriate holes on the rack. And then use the supplied screws to mount the RPU in the rack. (Leave about two inches of space on the sides of the RPU to ensure adequate ventilation.)

Making Connections

Caution: Caution:DO NOT connect the RPU to an AC power source until the DC power cord has been connected to the other device (hub or switch).

1. Connect one end of the AC cord to the AC receptacle on the supported devices (hubs or switches), and the other end to a grounded power outlet.
2. Use the provided star-head screwdriver to loosen the screws on the D-sub receptacle faceplates and remove the faceplates from both the RPU and the supported device (hub or switch).
3. Connect one end of the DC cord to the redundant power receptacle on the other device (hub or switch), and the other end to the IEC receptacle on the RPU.
4. Connect one end of the AC cord to the AC receptacle on the RPU, and the other end to a grounded power outlet. The Power LED on the RPU should light up.



SPECIFICATIONS

SMCRPU600W

Receptacle

IEC Socket 216C743-07

Size

440 x 285 x 430 mm (17.37 x 11.25 x 1.7 in.)

Weight

27.562 lb. (5.0 kg)

Temperature

Operating: 0 to 40 °C (32 to 104 °F)

Storage: -40 to 70 °C (-40 to 158 °F)

Relative Humidity

20% to 90%

Cooling

4 fans

AC Input Power

100 to 240 VAC, 50 to 60 Hz

DC Power Cable Connector

14-pin plastic cable

Overload Protection

Reduces output to safe levels when output exceeds 110%

MTBF

TBD

Safety Compliances

CSA 22.2 No.950, EN60950 (TÜV), IEC 60950

SPECIFICATIONS

Compliances

Emissions

FCC Class A

VCCI Class A

Industry Canada Class A

EN55022 (CISPR 22) Class A

C-Tick - AS/NZS 3548 (1995) Class A

Warranty

One year

Fan

Voltage

+12 VDC

Operating voltage Range

7.0V to 13.8V

Speed

8200 RPM

Air Delivery

9.43 CFM

Noise

30.5 dB

Power Supply

Voltage

+12 VDC

Initial Accuracy

+/- 1%

Current

2A (Minimum)

13A (Maximum)

Line Regulation

+/- 1%

Load Regulation

+/- 10%

Noise and Ripple

10%, peak to peak

Overshoot and Undershoot

5%

SPECIFICATIONS

FOR TECHNICAL SUPPORT, CALL:

From U.S.A. and Canada (24 hours a day, 7 days a week)
(800) SMC-4-YOU; (949) 679-8000; Fax: (949) 679-1481
From Europe (8:00 AM - 5:30 PM UK Time)
44 (0) 118 974 8700; Fax: 44 (0) 118 974 8701

INTERNET

E-mail addresses:

techsupport@smc.com
european.techsupport@smc-europe.com
support@smc-asia.com

Driver updates:

http://www.smc.com/index.cfm?action=tech_support_drivers_downloads

World Wide Web:

<http://www.smc.com>
<http://www.smc-europe.com>
<http://www.smc-asia.com>

FOR LITERATURE OR ADVERTISING RESPONSE, CALL:

U.S.A. and Canada:	(800) SMC-4-YOU;	Fax (949) 679-1481
Spain:	34-93-477-4935;	Fax 34-93-477-3774
UK:	44 (0) 118 974 8700;	Fax 44 (0) 118 974 8701
France:	33 (0) 41 38 32 32;	Fax 33 (0) 41 38 01 58
Italy:	39 02 739 12 33;	Fax 39 02 739 14 17
Benelux:	31 33 455 72 88;	Fax 31 33 455 73 30
Central Europe:	49 (0) 89 92861-0;	Fax 49 (0) 89 92861-230
Switzerland:	41 (0) 1 9409971;	Fax 41 (0) 1 9409972
Nordic:	46 (0) 868 70700;	Fax 46 (0) 887 62 62
Northern Europe:	44 (0) 118 974 8700;	Fax 44 (0) 118 974 8701
Eastern Europe:	34 -93-477-4920;	Fax 34 93 477 3774
Sub Saharian Africa:	27-11 314 1133;	Fax 27-11 314 9133
North Africa:	34 93 477 4920;	Fax 34 93 477 3774
Russia:	7 (095) 290 29 96;	Fax 7 (095) 290 29 96
PRC (Beijing):	86-10-8251-1550;	Fax 86-10-8251-1551
PRC (Shanghai):	86-21-6485-9922;	Fax 86-21-6495-7924
Taiwan:	886-2-8797-8006;	Fax 886-2-8797-6288
Asia Pacific:	(65) 6 238 6556;	Fax (65) 6 238 6466
Korea:	82-2-553-0860;	Fax 82-2-553-7202
Japan:	81-3-5645-5715;	Fax 81-3-5645-5716
Australia:	61-2-8875-7887;	Fax 61-2-8875-7777
India:	91 22 5696 2790;	Fax 91 22 5696 2794
Middle East:	97 14 299 4466	Fax 97 14 299 4664
Thailand:	66 2 651 8733	Fax 66 2 651 8737

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www.smc-europe.com or www.smc-asia.com.

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