



QUINTECH™

Electronics and Communications Inc.

OPERATING & MAINTENANCE MANUAL

RPS 24/5.5 SERIES REDUNDANT POWER SUPPLY Part No. RPS2455FAC000



QUINTECH ELECTRONICS AND COMMUNICATIONS, INC.
250 Airport Road Indiana, PA 15701 (800) 839-3658 (724) 349-1412 Fax: (724) 349-1421
<http://www.qecinc.com/> info@qecinc.com

RPS2455FAC000 Rev. B

IMPORTANT SAFETY INSTRUCTIONS

- ⚠ Read these instructions.
- ⚠ Keep these instructions.
- ⚠ Heed all warnings.
- ⚠ Follow all instructions.
- ⚠ Clean only with dry cloth.
- ⚠ Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- ⚠ Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- ⚠ Only use attachments/accessories specified by the manufacturer.
- ⚠ Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Attention: Contient une pile de lithium. Risque d'explosion dans le cas où la pile ne serait pas correctement remplacée. Remplacer uniquement avec une pile semblable ou équivalente au type de pile recommandé par le fabricant.

Warning

- ⚠ To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- ⚠ This apparatus must be earth grounded. Use the three wire grounding type line cord supplied with the product.
- ⚠ Do not open the unit - risk of electric shock inside.

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RPS2448FQC000 Rev. E

FCC / INDUSTRY CANADA COMPLIANCE

“NOTE: 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 in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this device in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.”

This Class A digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. Operation is subject to the following two conditions; (1) this device digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. Operation is subject to the following two conditions; (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

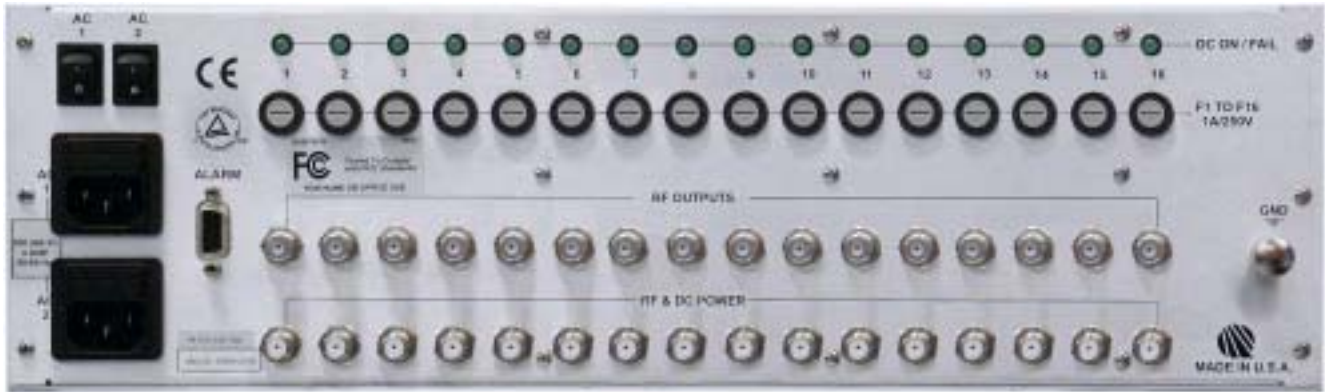
Cet appareillage numérique de la classe A répond à toutes les exigences de l'interférence canadienne causant des règlements d'équipement. L'opération est sujette aux deux conditions suivantes: (1) ce dispositif peut ne pas causer l'interférence nocive, et (2) ce dispositif doit accepter n'importe quelle interférence reçue, y compris l'interférence qui peut causer l'opération peu désirée.

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CONFIGURATION:

The RPS Series Redundant Power Supply is a power supply source designed to power as many as sixteen (16) LNA's, LNB's, Up/Downconverters, Line Amplifiers, and Active Splitters. The unit is comprised of two separately fused power supplies, providing a redundant capacity of 5.5 Amps. The supplies provide instantaneous redundancy should one of them fail. Care should be exercised to ensure that the power draw of all equipment connected to the RPS does not exceed the rated output of the RPS.

Two 2 Amp fuses are supplied with your system for use with the AC inputs. When replacing an input fuse, use only 3 AG 2 Amp fuses. The fuses are located behind the removable tabs immediately above their respective AC plugs. Also located on the rear panel are fuses to protect the VDC outputs. Dual AC inputs are provided for redundancy, but each input can be used individually.

The "F" type connectors designated "RF & DC Power" should be connected to the RF signal source (equipment requiring DC power).

The "F" type connectors designated "RF OUTPUTS" should be connected to the RF signal destination, (typically satellite receivers or L-band switching or routing systems).

Each VDC output is individually fused (fuseholders are located above "RF OUTPUT"). When replacing fuses F1 to F16, replace with 3AG 1 Amp fuses. LED power indicators are located above each VDC fused output. **Be sure to turn off power to the unit before connecting the coaxial cables to prevent blowing the output fuses. If the unit is currently in service and cannot be shut off, remove the corresponding VDC output fuse before connecting the cable to that output.**

The front panel has power supply indicators and test ports for monitoring the power supplies. The test points will measure slightly higher, approximately 0.7 VDC, than the rear panel terminals at maximum load. Both AC inputs must be activated for DC redundancy. For true AC redundancy separate AC sources must be applied.

Your unit has been configured for nominal voltage or +24 VDC @ 5.5 Amps and has been designed for international use with an input voltage of 100-240 VAC, 50/60 Hz.

The two power supply modules are on individual drawers to provide easy replacement of a failed module. The failed module can be replaced while the RPS Series Redundant Power Supply is in operation resulting in zero downtime. Additional modules can be purchased separately to allow for spares.

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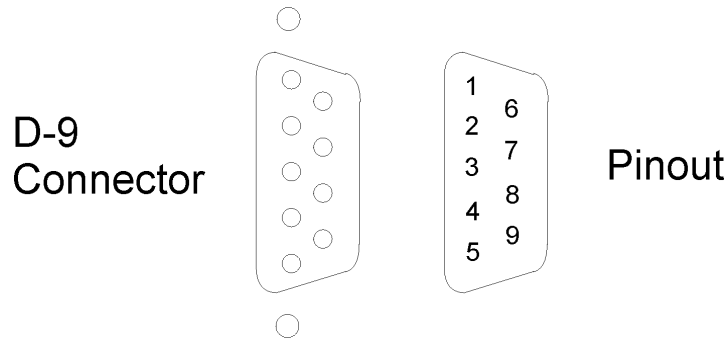
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All RPS F-Series redundant power supplies include form 'C' contacts for remote alarm notification of a failed power supply.

Upon powering up the RPS, relay coils will energize. If a DC supply fails, the relay will revert to its normally closed position, indicating a failure.

Pinouts for the remote alarm function are indicated below.



"ALARM" PINOUT					
PSU 1			PSU 2		
1	2	3	4	5	6
NO	NC	C	NO	NC	C
RELAY STATE WITH POWER ON					

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THE FOLLOWING PROCEDURE SHOULD BE STRICTLY ADHERED TO WHEN REPLACING A FAILED POWER SUPPLY MODULE:

- 1) To power down a failed module, turn off the appropriate switch on the rear panel, (switch 1 for module 1, switch 2 for module 2). Wait 5 minutes for the capacitors to discharge.
- 2) Remove the front panel module mounting screws.
- 3) Using the handle, slowly slide the module out of the enclosure (use caution, the power supply may be hot).
- 4) Carefully slide the replacement module into the rack enclosure. Be sure to properly align the plug on the rear of the replacement supply with the socket inside the power supply chassis. If the connector is properly aligned, the replacement module's faceplate will set flush against the faceplate of the power supply chassis.
- 5) Replace the front panel module mounting screws.
- 6) Turn the power switch back on.

The RPS Series Redundant Power Supply is now 100% operational.

SPECIFICATIONS:

Output Voltage:	+24 VDC
Output Current:	5.5A @ 24 VDC (total load)
Input Connectors:	(16) "F" type, 75T
Output Connectors:	(16) "F" type, 75T#
Power Required:	100-240 VAC, 50/60 Hz
Power Consumption:	220 W max.
Mechanical:	3 RU rack mount enclosure (19" wide x 20" deep x 5.25" high)
Weight:	24.5 lbs. gross (boxed), 19.5 lbs. net

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