



## FEATURES

- Power any Radio using the BA5590 battery
- Powers all existing 24v radios and RCU's to include the 117G
- Power Up to 4 radios at one time
- Uses 110/220 AC or 24vdc power to operate
- Provides clean, uninterrupted power to your radios
- No modification to the radio required
- Fast, easy setup and transport

# THE TOWER OF POWER

THE GEI24-RPA-T 24 VOLT RADIO POWER ADAPTOR



### Producing Power with Unmatched Reliability.

When the GEI24-RPA-t is used with both 120/220v AC and 24 VDC it provides unmatched reliability. In the event of a loss of AC power, GEI24-RPA-t will continue to power the radios using the 24v DC source. To ensure the 24v battery pack is up to the task, the GEI24-RPA-t charges the battery as long as the AC is providing power but it will not over-charge the battery.

The GEI24-RPA-t Produces power for any communication device requiring the BB2590 or BA5590 style batteries by using 110 – 220 VAC (shore power or generator) and/or 24 VDC.

When AC or DC alone is used to power the GEI24-RPA-t, it provides a clean, regulated DC output voltage.

Connection to the radio is made with no modification needed. Simply connect the GEI24-RPA-t plug to the radio where the battery would normally connect.

Powering the GEI24-RPA-t via 24 VDC is as simple as plugging in the supplied NATO slave plug into any vehicle with a mating connector. No complicated cable hookup or accessing the battery compartment is needed.

**Graywacke**  
Engineering

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## GENERAL SPECIFICATIONS

Efficiency	85% typical
Isolation Voltage (input to output)	1500VDC min
Isolation Voltage (input to case & output to case)	750VDC
Isolation Resistance (input to output)	>100 M Ohms
Switching Frequency (Fixed)	400 kHz $\pm$ 10%
Minimum Load	none required
Weight	57.6 lbs
Dimensions	23.5L x 14W x 16D
Working Temperature Range	0 - 55°C
Storage Temperature	-20 to 80°C

### 12/24 VDC Accessory Outputs:

Pin Configuration:	pin 1(-), pin 2(+)	- 12.2 VDC
	Pin 4(-), pin 3(+)	- 12.2 VDC

## INPUT SPECIFICATIONS

Input AC Voltage Range	90 VAC – 132 VAC, 216 VAC – 240 VAC
Input DC Voltage Range	18-36 VDC
Nominal DC Input	24 VDC
Input Voltage Lockout	<16 >38VDC
Input Filter	Pi input filter
Input Reflected Ripple	20mA p-p

## OUTPUT SPECIFICATIONS

Output Current	pin 1(-), pin 2(+)	- 5 amp
	Pin 4(-), pin 3(+)	- 5 amp
Output Voltage Tolerance		$\pm$ 1% max
External Output Trim		$\pm$ 10%
Line Regulation		$\pm$ 0.1%
Load Regulation		$\pm$ 0.1%
Short Circuit Protection		Continuous
Over Voltage Protection		approx. 120% V out, self-resetting
Ripple/Noise (20MHz BW)		1.5% V out
Current Limiting Inception		approx. 125%
Thermal Overload		+110°C base plate, self-resetting

## 24 VDC BATTERY CHARGER SPECIFICATIONS:

(Note: Specifications represent usage exclusively for the purpose of charging)

DC Output Voltage (No Load)	approx 27.2 V (DC)
Output Voltage Tolerance (No Load)	+ or - .5%
Output Amperage, Max Continuous	40 Amps
Output Voltage (Full Load) approx	>27.0 V (DC)
Maximum Power Output, Continuous	1100 Watts
Typical Efficiency	>80%
Max Inrush Current, Single Cycle	50 Amps
Short Circuit Protection	Yes
Overload Protection	>100%
Load Regulation	<1%
Fan Control	PROPORTIONAL
Thermal Protection	YES

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