

# Power Supplies - Heavy Duty Series

These super-rugged DC supplies are ideal for powering 12 and 24 volt communication equipment in base stations, remote sites and portable communication applications where reliability is essential. The proven linear circuit design provides pure output and long life.

These power supplies have been produced by Newmar for more than 25 years and are used in communication systems world wide where high reliability in hostile environments is essential.

## Features

- Excellent Regulation and Ripple Spec: Output voltage maintained within 1% under all line and load conditions within rating; Ripple is less than 40 mV P-P. (12 volt) or 70 mV P-P (24-volt)
- Input voltage 115 or 230 VAC selected by slide switch on the front panel.
- Polyurethane conformal coated PC board and corrosion resistant heavy duty aluminum case with integral shock mounts assures survival in hostile environments
- Heat generated by semi-conductors is extracted and dissipated by large heat sink fins that maximize air contact for cool operation and long life of components.
- Supply and Load Circuit Protection: overvoltage, current limit; (set @ 105% of intermittent rating), thermal overload and input/output fusing.
- Thermally activated cooling fan on "CD" units.



## Input Range

105-125/210-250 VAC (selectable), 50-60 Hz  
Derate to 50% output below 110 and 220 VAC

## Operating Temperature

### Standard Units

0-50°C, Derate Linearly From 100% @ 40°C To 50% @ 50°C Thermal shutdown @ 85°C Case temperature

### C.D. Units

0-65°C, Derate Linearly From 100% @ 50°C To 50% @ 65°C Thermal Shutdown @ 85°C Case temperature

## Duty Cycle

**Intermittent:** 20 minutes max on time, 20% duty

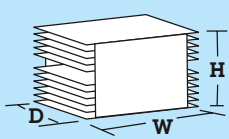
**Continuous:** 24 Hours/Day 100% Duty

## Options

- Modify for use as a Battery Charger
- Output voltage adjust (see Output Voltage for range)
- Transfer relay for back up battery in event of power failure (ERC option see page 28)

## Specifications

Model	Nominal Input VAC	Output Amperage		Case Size Ref.	Weight	
		Intermittent	Continuous		Lbs.	Kg.
<b>12 Volt Output</b>						
115-12-8	115/230	8	5	P-2	10	4.5
115-12-20A	115/230	20	8	P-3	20	9.1
115-12-35CD	115/230	35	35	P-5	32	14.6
<b>24-Volt Output</b>						
115-24-10	115/230	10	4	P-3	20	9.1
115-24-18CD	115/230	18	18	P-5	32	14.6
115-24-35CD	115/230	35	35	P-6	60	27.3

	Inches			Centimeters			
	H	W	D	H	W	D	
	P-2	6.0	4.6	8.5	15.2	11.7	21.6
	P-3	5.7	4.8	16.3	14.5	12.2	41.4
	P-5	6.5	9.5	14.0	16.5	24.1	35.6
	P-6	6.5	13.0	18.75	16.5	33.0	47.6

## Output Voltage

### 12 V Models:

13.6 VDC (Internally adjustable 12.6-14.5 VDC)

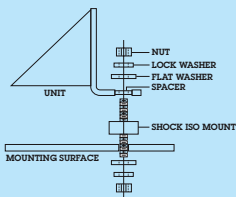
Ripple: 40mV P-P (@ 110-125 / 220-250 VAC input)

### 24 V Models:

24.5 VDC (Internally adjustable 21-27.5 VDC)

Ripple: 70mV P-P (@ 110-125 / 220-250 VAC input)

**Regulation All Models:** 1% Line and Load (@ 110-125 / 220-250 VAC input)



## Option: Extreme Vibration Mounting Kit

The Extreme Vibration Mounting Kit is available to protect NEWMAR power converters from the extreme stresses of shock and vibration when mounted on high-vibration vehicles.

The kit (pictured here) replaces the standard vibration kit provided with the unit and fits into the unit's mounting flange to act as a "super shock absorber" for electronics in high-vibe applications. It is available to fit all NEWMAR units from 2 to 70 lbs. Specify KIT-L for units which weigh 2-15 lbs. and Kit-H for units which weigh 16-70 lbs.



Powering the Network