

#### FEATURES

- Sine wave or modified sine wave output
- Low output THD
- Unique overload protection
- Excellent Line & Load regulation
- Optional bypass with alarms



#### AC POWER USING YOUR DC SOURCE OR BATTERIES

The Behlman INV-1200 and INV-1210 DC to AC Inverters deliver 1200 VA of clean, regulated AC power in a 3.5" high rack mount chassis. You have a choice of a high quality sine wave output with very little distortion, INV-1200 or a well regulated modified sine wave output, INV-1210.

The standard unit is available as a simple inverter or with Option D1, a transfer circuit will switch the load to an AC input upon loss of the DC input or inverter. You could choose Option A1, with AC as the primary power with a transfer to the DC input upon loss of the AC. Both options come with front panel indicators and three form "C" contacts for alarms.

The INV-1200 is ideal for powering sensitive electronics that require clean, low distortion sine wave inputs like microprocessor based instruments and PLC's. The INV-1210, modified sine wave output is a low cost solution to power loads normally considered difficult for inverters like switching power supplies, motors and non-linear loads. The INV-1210 modified sine wave output has both peak and RMS value equivalent to a sine wave

If you have an application where you require AC power from your batteries or DC source Behlman's INV series is your best choice.

#### INPUT

##### Voltage:

**DC:** 48 VDC +/- 20% or 125 VDC +/- 20%  
or 250 VDC +/- 20% (INV1200 only)  
Maximum DC burden (full load):  
40 amps DC @ 38 VDC, 15 amps DC @ 100 VDC  
or 7.5 amps DC @ 200 VDC

#### OUTPUT

**Power:** 1200 VA  
**Voltage:** 120 VAC +/- 5%, 60 Hz, isolated  
**Current:** 10 Amps  
**Crest Factor:** 3:1  
**Power Factor:** 100% of rated output into any power factor load  
**Distortion:** <3% THD typical Model INV1200  
**Line Regulation:** +/- 0.3% for +/- 10% line change  
**Load Regulation:** +/- 2.0%, no load to full load  
**Efficiency:** 80-85% typical

#### PROTECTIVE CIRCUITS

**Input:** Main circuit breaker  
**Constant Current:** Overload automatically causes voltage fold-back to provide maximum current without distorting output waveform  
**Short Circuit:** Short circuit overload electronically latches output open to protect load... power restored by cycling input power  
**Thermal:** Internal temperature sensor shuts off output to prevent heat damage  
**Bypass:** With Option D1, If unit fails, the AC input will be routed to the output. With front panel bypass fuse

#### CONTROLS / INDICATORS

**Power On/Off:** Circuit breaker  
**Indicators:** AC IN, DC IN, INVERTER  
**Bypass Fuse:** 15 Amps

#### ALARM CONTACTS with OPTION A1 or D1

**Contact closures:** AC IN, DC IN, Inverter OK  
**Contact rating:** 0.6 Amps @ 125 VAC; 0.8 Amps @ 110 VDC; 2 Amps @ 30 VDC

# Inverter

## MECHANICAL & ENVIRONMENTAL

<b>Dimensions:</b>	High-strength bench top chassis with rack-mount kit 17"W X 3.5"H X 17"D (43.2 cm X 8.9 cm X 43.2 cm)	<b>Operating Temperature:</b>	-4° to 131° F (-20° to 55° C)
<b>Weight:</b>	25 lbs (11.3kgs)	<b>Humidity:</b>	Up to 95% non-condensing
<b>Input Connections:</b>	Barrier strip on rear	<b>SWC:</b>	Designed to meet IEEE C37.90.1
<b>Output Connections:</b>	Two NEMA 5-15 receptacles on rear	<b>Fast transient:</b>	Designed to meet IEEE C37.90.1
<b>Alarms Connections:</b>	Barrier strip on rear	<b>EMI:</b>	Designed for immunity to conducted & radiated EMI
		<b>RFI:</b>	Designed to meet IEEE C37.90.2-1997

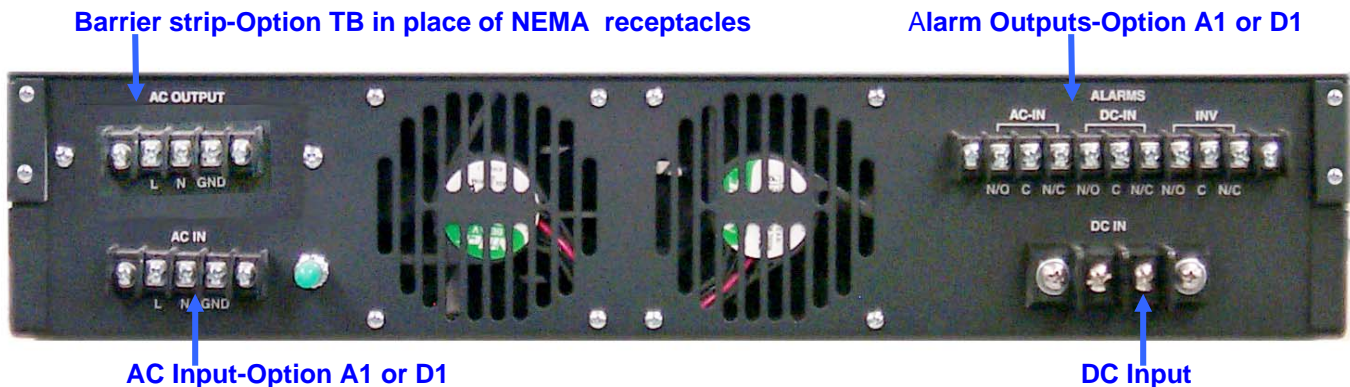
### OPTIONS: *Contact factory for additional options*

#### D1: AC Input with Indicators and Alarms

DC input primary. Includes AC input with "transfer circuit" to switch from DC input to AC input, in 300 msec typical, upon loss of DC input or inverter. Includes AC fuse, (3) indicators and (3) form "C" contacts for AC IN, DC IN and INV

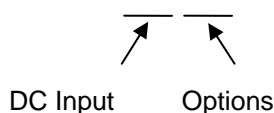
A1: Same as Option D1 except AC is primary input with "transfer" to DC input upon loss of AC

TB: Barrier strip on rear in place of NEMA 5-15 receptacles



## MODEL SELECTION GUIDE

INV-1200-125-D1



[www.behlman.com](http://www.behlman.com)

**ORBIT** POWER GROUP  
**Behlman Electronics**

Headquarters:  
80 Cabot Court, Hauppauge, NY 11788  
631 435-0410 800 874-6727  
Fax: 631 951-4341

[sales@behlman.com](mailto:sales@behlman.com)

