

#### FEATURES

- 1200 Watts of AC Power
- 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

Behlman's new and improved INV-1200 (Gen 2) DC to AC Inverters deliver 1200 Watts of clean, regulated AC power in a 3.5" high rack mount chassis. All units come with an input circuit breaker, protective circuitry and LED indicators for DC present and Inverter OK.

The INV-1200 (Gen 2) is rated in watts, the amount of power we can deliver, unlike most inverters that are specified in Volt-Amps (VA), similar to a UPS (Uninterruptible Power Source). Units rated at 1200 VA would only supply 960 Watts at 0.8 pf or 840 watts at 0.7 pf

The standard INV-1200 (Gen 2) is available as a simple DC-AC inverter or you can add Option D1 that will switch

the load to an AC bypass input upon loss of the DC input or inverter. You alternately could choose Option A1, with AC bypass as the primary power with a transfer to the DC input upon loss of the AC. Both options come with a third front-panel "AC" indicator and three form "C" contacts for alarms.

The INV-1200 (Gen 2) is ideal for powering sensitive electronics that require clean, low-distortion sine wave inputs like microprocessor based instruments and PLCs.

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

#### INPUT

##### Voltage:

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

AC: (A1/D1) options only) 130VAC max @ 30Amps (fuse)

#### OUTPUT

- Power: 1200 Watts
- Voltage: 120 VAC +/- 2%, 60 Hz, isolated
- Frequency: 60Hz +/- 0.1% (50Hz and 400Hz available)
- Current: 10 Amps RMS continuous, 30 Amps peak
- Crest Factor: 3:1
- Power Factor: 100% of rated output into any power factor load
- Distortion: <3% THD typical
- 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 rear panel bypass fuse

#### CONTROLS / INDICATORS

- Power On/Off: Circuit breaker
- Bicolor LED: DC IN, INVERTER (OK)

#### ALARM CONTACTS with OPTION A1 or D1

- Contact closures: AC IN, DC IN, Inverter OK
- Contact rating: 0.5 Amps @ 125 VAC;  
2 Amps @ 30 VDC

## MECHANICAL & ENVIRONMENTAL

**Dimensions:** 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)

**Weight:** 25 lbs (11.3kgs)

**Input Connections:** Barrier strip on rear

**Output Connections:** Two NEMA 5-15R receptacles on rear

**Alarms Connections:** Barrier strip on rear

**Operating Temperature:** -4° to 131° F (-20° to 55° C)

**Humidity:** Up to 95% non-condensing

**SWC:** Designed to meet IEEE C37.90.1

**Fast transient:** Designed to meet IEEE C37.90.1

**EMI:** Designed for immunity to conducted & radiated EMI

**RFI:** 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 bypass input, in less than 30 milliseconds, upon loss of DC input or inverter.

Includes AC fuse, third indicator (AC IN) and (3) form "C" contacts for AC IN, DC IN and INV

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

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

I: Transformer option for 220-240VAC output at 50Hz or 60Hz; requires additional 2U chassis

Barrier Strip-Option TB in place of NEMA receptacles

Alarm Outputs-Option A1 or D1



## MODEL SELECTION GUIDE

INV-1200-125-D1

DC Input

Options



[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)

