FEATURES

- 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-2500 DC to AC Inverter delivers 2500 VA of clean, regulated AC power in a 7.00" (4U) high rack mount chassis. The INV-2500 delivers a high quality sine wave output with very little distortion.

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 of 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-2500 is ideal for powering sensitive electronics that require clean, low distortion sine wave inputs like microprocessor based instruments and PLC’s. The INV-2500 is a low cost solution to power loads normally considered difficult for inverters like switching power supplies, motors and non-linear loads.

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%
- 125 VDC +/- 20%

Maximum DC burden (full load):
- 80 amps DC @ 40 VDC,
- 30 amps DC @ 100 VDC

OUTPUT

Power: 2500 VA
Voltage: 120 VAC +/- 5%, 60 Hz, isolated
Current: 21 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.

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**CONTROLS / INDICATORS**

- **Power On/Off:** Circuit breaker
- **Indicators:** AC IN, DC IN, INVERTER
- **Bypass Fuse:** 30 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
  - 2.0 Amps @ 30 VDC

**MECHANICAL & ENVIRONMENTAL**

- **Dimensions:** High-strength bench top chassis with rack-mount kit:
  - 17"W X 7.00"H X 19"D
  - (43.2 cm X 17.8 cm X 48.3 cm)
- **Weight:** 35 lbs (15.8 kgs)

- **Input Connections:** Barrier strip on rear
- **Output Connections:** Barrier strip 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 37.90.1
- **Fast transient:** Designed to meet IEEE 37.90.1
- **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 input, in 16 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

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**MODEL SELECTION GUIDE**

INV-2500-125-D1

DC Input Options

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[Diagram of inverter controls and connections]