

### RUPS-1250-(50, -60 or -400)

#### FEATURES

- True On-line UPS- No break in power
- Hot-swappable Batteries
- Cold start- start on DC capability
- RS-232 Interface
- Alarms with contact closure
- Frequency Conversion capability



#### ULTRA-RELIABLE UNINTERRUPTIBLE POWER FROM ANY AC SOURCE LAND, SEA OR AIR

The Behlman RUPS-1250 Uninterruptible Power Source is a true on-line UPS that continuously conditions incoming power and provides a high quality sine wave output with very low distortion. In the event of a loss of input power the RUPS will switch to the internal batteries, in ZERO time, for a safe shutdown. The RUPS continuously monitors status, input, battery conditions, fault conditions and alarms. This information is displayed on the front panel and can be communicated to a host via a built-in RS-232 Interface and relay contact closures.

#### INPUT

<b>Voltage:</b>	95 – 270 VAC, single-phase
<b>Frequency:</b>	45 – 450 Hz
<b>Isolation:</b>	Galvanic isolation
<b>PFC:</b>	Greater than 0.9

#### OUTPUT

<b>Waveform:</b>	<b>Pure Sine Wave</b>
<b>Power:</b>	1250 VA/1000 W
<b>Voltage:</b>	115 VAC +/- 2%
<b>Current:</b>	10.9 Amps
<b>Frequency: (F)</b>	-50 Hz, -60 Hz, -400 Hz +/- 0.1%
<b>Crest Factor:</b>	3:1
<b>Power Factor:</b>	100% of rated output into any power factor load
<b>Distortion:</b>	3% max THD linear load

<b>Line Regulation:</b>	+/- 0.5% for +/- 10% line change
<b>Load Regulation:</b>	+/- 2.0%, no load to full load
<b>Efficiency:</b>	80% typical (AC-AC)
<b>Switch-over time:</b>	Zero, AC-AC or DC-AC

#### PROTECTIVE CIRCUITS

<b>Input:</b>	Main Circuit Breaker
<b>Output:</b>	Fuse (on rear panel)
<b>Constant Current:</b>	Overload automatically causes voltage fold-back to provide maximum current without distorting output waveform

The RUPS-1250 is a rugged, compact rack-mountable unit, with hot-swappable batteries (from the front panel). The RUPS can “cold-start” (start on DC) and has the ability to output a frequency different from the source frequency. The RUPS-1250 is ideal for remote and difficult-to-access locations. It provides conditioned and back-up power for control, computer, instrumentation, communication and other power sensitive equipment.

The RUPS-1250 can be used world-wide and is an exceptional device for industrial, aerospace and military ground, airborne and shipboard applications.

<b>Short Circuit:</b>	Short circuit overload electronically latches output open to protect load... power restored by cycling input power
<b>Thermal:</b>	Two internal temperature sensors. First sensor sounds alarm and second sensor shuts off output to prevent heat damage
<b>Batteries:</b>	Fuse (in battery chassis)
<b>Surge:</b>	IEEE C62.41-1980
<b>ESD:</b>	Withstand capability: IAW IEC 801.2, Level 4

#### CONTROLS / INDICATORS

<b>Input Power:</b>	On/Off Circuit breaker with guard, locking pin and Green LED
<b>Output:</b>	On/Off switch and Green LED
<b>Battery:</b>	On/Off switch with guard to turn battery off before replacing
<b>Display:</b>	24 character x 2 line Vacuum-Fluorescent display, providing the following output data: Volts (V), Amps (A), Frequency (F), Watts (W), Power Factor (PF), Battery Voltage (B) and Faults (see Table 1)
<b>Remote Interface:</b>	RS-232 interface for status, reset and output On/Off, contacts for alarms and remote switch for output On/Off
<b>Alarm Silence:</b>	Momentary switch to silence alarm Will not silence LB, OV, OT, OL

TABLE 1

FAULT/ALARM	DISPLAY	ALARM SILENCE Momentary switch	CONTACT CLOSURE 3 Form "C" contacts	OUTPUT STATUS
Line Fail	(LF)	YES	LINE FAIL	ON
Over Voltage	(OV)	NO	FAULT	OFF
Constant Current	(CC)	YES	FAULT	ON
High Temperature	(HT)	YES	FAULT	ON
Over Temperature	(OT)	NO	FAULT	OFF
Overload Latch	(OL)	NO	FAULT	OFF
Low Battery	(LB)	NO	LOW BATT	ON for limited time

**BATTERIES**

**Removable, Hot-swappable, Module**

- Type:** Sealed, maintenance free, Lead Acid (four, 12 V)
- Run Time:** 5 minutes typical at full load, 25°C (77°F)
- Recharge Time:** 4 hours to 90% of full charge
- Cold-Start:** Start on battery without AC input

**MECHANICAL & ENVIRONMENTAL**

- Dimensions:** High-strength rack-mount chassis with handles front and rear  
19"W X 7.00"H X 21"D  
(48.3 cm X 17.8 cm X 53.3 cm)
- Weight:** UPS without battery module: 36.0 lbs.  
Battery module: (approx.) 36.0 lbs  
Total weight: (not to exceed) 75.0 lbs
- Input Connector:** J1- MS3400D16-10D
- Output Connector:** J2- MS3400D16-10E
- Data/Alarms Connector:** J3- DB15
- Battery Connector:** J4- MS3402E-20-23S
- Ground Stud:** #10-32
- Slide provisions:** Mounting provisions compatible with General Devices CTHRS-122
- Operating Temperature:** -4° to 122° F (-20° to 50° C)
- Storage Temperature:** -40° to 149° F (-40° to 65° C)
- Humidity:** Up to 95% non-condensing
- Altitude:** Operating: 0-15,000 ft.  
Non-operating: 40,000 ft.
- Cooling:** Internal fans, air-flow front to rear
- Designed to meet the following:**  
Mil-STD-1399  
MIL-STD-810E Vibration: Method 514.4, Category 5  
Shock: Method 516.4, Procedure 1  
MIL-STD-461  
MIL-STD-704



**Rear View**

**OPTIONS**

- BM2** Battery Module for 12 minutes run time typical  
Weight approximately 48 lbs
- BS** Battle Short- overrides OT shut down.  
Audible alarm stays on.
- EB4** External Battery chassis (four 12V)
- S** Slides
- 28V** Customer supplied 28 VDC to turn output On/Off.

**MODEL SELECTION: RUPS-1250-(F)-(Options)**

**RUPS-1250-400-S-28V**

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