

## Rugged-AC 1250



### RUGGED SERIES

The Acumentrics **Rugged-AC 1250** is designed for worldwide deployment in harsh physical and electrical environments. These inverter-only models are for customers who require power conditioning only, not backup.

Our **Rugged-AC 1250** is uniquely suited for use in demanding shipboard and mobile applications.

The **Rugged-AC** provides 1250VA of nominal 115VAC output from an input range of 80-265 VAC / 47-63Hz, or 22-32 VDC. This wide voltage and frequency tolerance enables users to power up with field generators in any international power standard. DC input makes this system ideal for use aboard tracked and wheeled tactical vehicles.

Our durable and versatile UPS system contains advanced on-line technology to provide highly reliable power back-up and conditioning for the most sensitive electronic devices.

Optional shipboard models incorporate a double-pole circuit breaker approved for use with shipboard Delta power.

*Acumentrics designs and manufactures innovative products for power quality and on-site generation. Product lines include tubular solid oxide fuel cell systems, uninterruptible power supplies and inverters..*

**Call today: 800-332-0277**

### FEATURES:

#### Power Factor Corrected, Wide Input Range

The **Rugged-AC** accepts a wide range of voltage and frequency inputs while providing seamless active power-factor correction and clean, reliable AC power.

#### On-line

This true on-line, double conversion uninterruptible power supply continually creates a pure sine wave AC output from a DC bus, thus protecting sensitive equipment from surges, spikes, brownouts, blackouts, and noise.

#### Dual Input, Automatic Power Selection

Our innovative design allows the UPS to automatically select AC or DC power input. In the event of an AC power failure the external DC input takes over.

#### Aluminum Chassis

The **Rugged-AC** is housed in a compact, lightweight chassis. All aluminum, welded construction allows overall weight of the unit to be minimized while still maintaining high durability.

#### Weather Resistant

Our gasket sealed enclosure and filtered air intake protects internal components from the damaging effects of airborne contaminants in the operating environment.

#### Wide Operating Temperature Range

A rated operating temperature range of -18°C to +50°C (0°F – 122°F) makes this UPS the product of choice for extreme environments.

#### Communication Port

The microprocessor-controlled **Rugged-AC** is equipped with a 9-pin communication port for user interface and remote monitoring.

### OPTIONAL FEATURES:

#### 24 VDC Output

Optional 250 watt, 24 VDC output available for specialized military applications.

#### Shipboard

The **Rugged-AC** is available with optional double-pole circuit breaker for use with shipboard Delta power. The 1250 series has been tested and approved by the US Navy NSWCCD-SSES for use with Type I shipboard power per Section 300A, MIL-STD 1399

### **BENEFITS:**

- Protects sensitive equipment from surges, spikes, noise.
- Easy to maintain.
- Wide Operating Temperature Range.

### **MODELS:**

- ACG1250INV*: AC In/AC Out/DC In, Inverter/Converter only
- ACG1250INV-24*: AC In/AC Out/DC In, Inverter/Converter only, 24VDC Output
- ACG1250INV-SH*: AC In/AC Out/DC In, Inverter/Converter only, Shipboard Use
- ACG1250INV-24SH*: AC In/AC Out/DC In, Inv/Conv only, 24VDC Out, Shipboard Use

### **INPUT SPECIFICATIONS**

- Input AC Voltage*: 80-265 VAC
- Frequency*: 47-63 Hz
- AC Input Circuit Breaker Rating*: 20A
- DC Input Voltage*: 22-32 VDC
- Maximum DC Current*: 70A
- Input Power Factor*: 0.99 typical
- Efficiency with 1000W load*: AC $\eta$  = 0.80 DC $\eta$  = 0.76

### **OUTPUT SPECIFICATIONS**

- Continuous Output Power*: 1250VA/ 1000W (total AC and DC) (25°C)
- Load Crest Factor*: 2.5 continuous
- AC Output Voltage*: 115 VAC +/- 5%
- AC Output Frequency*: 60 Hz +/- 0.5%
- AC Output Waveform*: Sinusoidal
- DC Output (-24 models only)*: 250W @ 24 VDC +/- 5%
- Total Harmonic Distortion*: 1.5% with 1000W resistive load

### **ENVIRONMENTAL**

- Operating Temperature*: -18° C to 50° C
- Storage Temperature*: -32° C to 66° C
- Humidity*: 10% to 95%
- Altitude*: 0 to 15,000 ft operating, 0 to 40,000 ft non-operating
- Rain*: Operates in blown precipitation
- EMI*: MIL-STD-461C, Notice 2
- Shock/drop*: 30° rotational without transit cases, 3 drops from 3' in transit cases
- Vibration*: MIL-STD-810E, 514.4, Procedure I, Category 8

### **MECHANICAL:**

- Chassis Size (H x W x D)*: 6" x 8.5" x 16"
- Case*: Aluminum
- Weight*: 38lbs.
- Connectors*: AC Input: MS3470L14-4P  
DC Input: MS27472T16F-6P  
AC Output: MS3470L14-4S\*  
DC Output: MS3470L-14-4S\*  
RS232 Compatible  
\*AC and DC output keyed differently

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