

# ACG1250

## Rugged Power Inverter

POWER INVERTER UNIT WITH DC OUTPUT OPTION

### Designed for worldwide deployment in harsh physical and electrical environments

The Rugged ACG1250 Power Inverter is uniquely suited for use in demanding shipboard and mobile applications, for customers who require power conditioning only, no backup.

This Power Conditioner inverter provides 1250VA/1000W of nominal 115VAC output from an input range of 80 VAC to 265 VAC / 47 Hz to 440 Hz or 22 VDC to 32 VDC. True Worldwide Input™ enables users to harness power from field generators, vehicles and any international power standard. This durable and versatile power conditioning system contains advanced double on-line conversion to provide highly reliable power conditioning for the most sensitive electronic devices. DC input makes this system ideal for use aboard tracked and wheeled tactical vehicles.

### FEATURES:

#### Power Factor Corrected, Wide Input Range

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

#### Double On-line conversion

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-Aluminum Chassis 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.

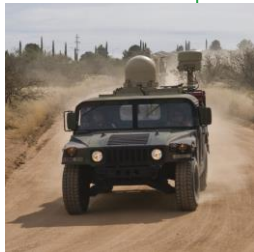
### OPTIONAL FEATURES:

#### 24 VDC Output

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

#### Shipboard

The Rugged-ACG1250 inverter 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



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**RELIABLE**  
**POWER™**

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ACG1250  
Power  
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Contact  
Acumentrics  
to discuss  
customized  
solutions.

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## MODEL Examples:

**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 (400 Hz optional)

**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:** <2.5% with 1000W resistive load

## ENVIRONMENTAL

**Operating Temperature:** -30° C to 65° C

**Storage Temperature:** -40° C to 70° C

**Humidity:** 10% to 95%

**Altitude:** 0 to 15,000 ft operating, 0 to 40,000 ft non-operating

**Rain:** Consult factory for this option

**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** with Acumentrics Cable

*\*AC and DC output keyed differently*

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

