

V2 COMPLIANT CHS4

# Rugged-UPS™ 1250

CONTINUOUS OUTPUT POWER: 1250VA / 1000W



**RUGGED  
RELIABLE  
POWER™**

Acumentrics durable and versatile Rugged-UPS™ equipment contains advanced double on-line conversion technology to provide highly reliable power conditioning and battery back-up for the most sensitive electronic devices in harsh and combat environments.

**The Acumentrics Rugged UPS™ 1250** is designed for worldwide deployment in harsh physical and electrical environments.

### AC and DC Power Output

Power management allows various combinations of AC and DC power up to the maximum power rating of the unit. The combined power output (AC and DC) is indicated on the LED bar graph and protected from overloading.

### On-Line Double Conversion

The Rugged-UPS™ creates DC voltage which is then converted to the needed AC or DC output voltage, protecting sensitive equipment from input surges, spikes, brownouts, blackouts and noise.

### RUPS Transferring

These units transfer seamlessly without interrupting the load quality and have zero switch over time

### Dual Input with Automatic Power Selection

On DC input models, our design allows the UPS to automatically select AC or DC power. In the event of an AC power failure, the external DC input takes precedence over the internal battery.

### Power Factor Corrected

The Rugged-UPS™ provides seamless active power-factor correction and clean, reliable AC or DC power.

### Dual Input with Automatic Power Selection

On DC input models, our design allows the UPS to automatically select AC or DC power. In the event of an AC power failure, the external DC input takes precedence over the internal battery.

### User-Replaceable Battery Pack

The Rugged-UPS™ features LFP or low maintenance, valve-regulated lead acid (VRLA) batteries, enclosed in a user-replaceable battery pack for rapid hot-swap field replacement.

### LFP Battery Pack

Backward compatible with existing units, these packs offer a safe energy source that is light weight with high cycle life and long run time.

### Lightweight Aluminum Chassis

The Rugged-UPS™ is housed in a compact, lightweight chassis. All aluminum, welded construction minimizes overall weight of the unit while maintaining high durability.

### Accepts True Worldwide Input™

The Rugged-UPS™ accepts AC input power from 80 VAC to 265 VAC / 47 Hz to 440 Hz, as well as DC input from 22 VDC to 32 VDC

### Shipboard

The Rugged-UPS™ 1250 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-SSSES for use with Type I shipboard power per Section 300A, MIL-STD 1399.



V2 COMPLIANT TO CHS4  
**Rugged-UPS™ 1250**  
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**MODELS:**

- ACG1250U:** AC in, DC in, AC out – no battery
- ACG1250U-26B:** AC in, DC in, AC out – half battery
- ACG1250U-52B:** AC in, DC in, AC out – full battery
- ACG1250U-24:** AC and DC in, AC and DC out – no battery
- ACG1250U-24-26B:** AC and DC in, AC and DC out –half battery
- ACG1250U-24-52B:** AC and DC in, AC and DC out –full battery

**INPUT SPECIFICATIONS**

- AC Voltage:** 80-265 VAC, single phase
- Frequency:** 47-63 Hz (440Hz Option)
- AC Circuit Breaker Rating:** 20A
- DC Voltage:** 22-32 VDC
- Maximum DC Current:** 70A
- Power Factor:** 0.99 typical
- Efficiency with 1000W Load:**  
AC  $\eta$  = 0.80 DC  $\eta$  = 0.76

**OUTPUT SPECIFICATIONS**

- Continuous Power:** 1250VA/1000W  
parallel units for greater load carrying capability
- Load Crest Factor:** 2.5 continuous
- AC Voltage:** 115VAC +/- 5%
- AC Frequency:** 60 Hz +/- 0.5Hz
- AC Waveform:** Sinusoidal
- DC Power (-24 model):** 250W @ 24VDC +/- 5%
- Total Harmonic Distortion (THD):**  
<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% (noncondensing)
- 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 w/o transit chassis  
3 drops from 3' in transit cases
- Vibration:** MIL-STD-810E, 514.4, Procedure I,  
Category 8

**MECHANICAL SPECIFICATIONS**

- Chassis Size (H x W x D):** 6" x 16" x 16"
- Weight:** w/o battery pack: 38lbs  
84lbs (-52B models) with LAB  
68lbs (-26B models) with LAB  
56 lbs with LFP battery

**BATTERY SPECIFICATIONS**

- Battery Type:** LFP or low maintenance VRLA
- Battery Energy:** LFP 25.6V20.8Ah  
LAB 24V26Ah (-52B models)  
LAB 24V18Ah (-26B models)
- Battery Runtime at full load:**  
LFP 30 minutes  
LAB 14 minutes (-52B models)  
LAB 9 minutes (-26B models)
- Recharge Time:**  
LFP 3 hours  
LAB 4 hours to 90% (-52B models)  
LAB 2 hours to 90% (-26B models)

**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

**MODELS** All Rugged-UPS™ models are available in shipboard configuration, parallel configuration and optional DC output configurations.

**ACG 125 1 U i 24 #.#K X S P N Y La C#**

- C#** = Bundled Product
- La** = Lead Acid Battery; **Li** = LFP Battery
- Y** = Bypass
- N** = SNMP; **W** = USB
- P** = Parallel
- S** = Shipboard
- X** = External Run Battery
- #.#K** = Wattage of DC Out  
(Ex. .3K = 300W, .6K = 600W, 1K = 1000W)
- 12** = 12 Volt DC Output; **24** = 24 Volt DC Output  
**28** = 28 Volt DC Output; **48** = 48 Volt DC Output
- i** = 230 VAC 60 Hz Option; **ia** = 230 VAC 50 Hz Option  
Nothing = 115 VAC (standard)
- U** = AC & DC Input; **R** = AC Input
- 1** = 1U; **2** = 2U
- 250** = 2500VA / 2000W; **125** = 1250VA/1000W
- Color option:  
**G** = Gray (standard); **B** = Black; **T** = Tan
- C** = Current Model; **N** = New Generation
- A** = Acumentrics

*Note: When a particular designation is missing from the part number then that option is NOT present in the device.*

Contact Acumentrics to discuss customized solutions.

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POWER™**

**Acumentrics Rugged-UPS™:**

- The Benchmark for Rugged Design – Unique Flo-Thru™ Technology
- Dedicated Product Support – Rapid Configuration and Customer Response
- For Use in Harsh and Combat Environments – Certified to Military Standards
- True Worldwide input™ – Tens of Thousands of units Fielded

