

V2 COMPLIANT CHS4  
**Rugged-UPS™ 3000**

CONTINUOUS OUTPUT POWER: 3000VA / 2400W



**Unique Flo-Thru™ Technology**

A unique heatsink tunnel design and gasket sealed enclosure provides maximum protection for components from the damaging effects of moisture, airborne particles, and other contaminants in the operating environment.

**Power Factor Corrected**

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

**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.

**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

**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.



V2 COMPLIANT TO CHS4  
**Rugged-UPS™ 3000**  
 CONTINUOUS OUTPUT POWER: 3000VA/2400W



**INPUT SPECIFICATIONS**

**AC Voltage:** 80-265 VAC, single phase  
**Frequency:** 47-440Hz  
**AC Circuit Breaker Rating:** 50A  
**DC Voltage:** 20-32 VDC  
**Maximum DC Current:** 120A  
**Power Factor:** 0.99 typical  
**Efficiency with 1000W Load:**  
 AC  $\eta$  = 0.86 DC  $\eta$  = 0.82

**OUTPUT SPECIFICATIONS**

**Continuous Power:** 3000VA/2400W  
 parallel units for greater load carrying capability  
**Load Crest Factor:** 2.5 continuous  
**Peak Current:** 40A (2400W AC output)  
 100A (2000W 28VDC output [no AC output])  
**AC Voltage:** 115VAC +/- 5%  
**AC Frequency:** 60Hz +/- 0.5Hz  
**AC Waveform:** Sinusoidal  
**DC Power (optional):** 250W, 600W, 1200W or  
 2000W @ 12, 24, 28, 48 or 54 VDC +/- 1%,  
 200mVPP, 20MHz BW at full load  
**Total Harmonic Distortion (THD):**  
 <2.5% with 2000W resistive load

**ENVIRONMENTAL**

**Operating Temperature:**  
 with LFP battery: -20°C to 60°C  
 with Lead Acid battery: -18°C to 50°C  
 w/o battery: -30°C to 65°C  
**Storage Temperature:** -32°C to 66°C  
 w/o battery: -40°C to 70°C  
**Humidity:** 5% to 95% (non condensing)  
**Altitude:** 0 to 15,000 ft operating;  
 0 to 40,000 ft non-operating

**BATTERY SPECIFICATIONS**

**Battery Type:** LFP or low maintenance VRLA  
**Typical Run Times:** LFP 8 minutes,  
 VRLA 6 minutes  
**Recharge Time:** LFP 3 hours, VRLA 5 hours  
**External Battery Run Times:**  
 LFP Battery: 30 minutes  
 VRLA Battery: 22 minutes  
*Recharge Time for EBM: 4 hours to 90%*

**MECHANICAL SPECIFICATIONS**

**Chassis Size (H x W x D):** 7" x 17" x 21"  
**Envelope size (H x W x D):** 7" x 18.5" x 23"  
**Weight:** w/o battery pack: 85lbs  
 with Lead-Acid battery: 135 lbs  
 with LFP battery: 103 lbs

**COMMUNICATION PORT**

9-pin (DB-9) for user interface and remote monitoring; SNMP is optional

**OPTIONS**

- DC Output: 12, 24, 28, 48 or 54 VDC Output
- AC Output: 230 VAC 50 Hz Output
- Rackmount Accessories
- External DC Input
- Extended Battery Pack(s)
- Parallel Operation for Loads up to 25kVA
- Simple Network Management Protocol Version - V3
- Shipboard – Double-pole circuit breaker approved for use with shipboard Delta power

**STANDARDS**

The Rugged-UPS™ 3000 is tested and certified to meet the following standards:

- EMI:** MIL-STD-461-F: RE102, CE102, CS101, RS103, CS114
- Shock:** Packaged MIL-STD-810-G method 516.4 IV, VI  
 Operating MIL-S-901-D, grade A, class II, type B
- Vibration:** MIL-STD-167-1, type I vibration  
 MIL-STD-810-G Cat. 8, procedure I
- Shipboard:** MIL-STD-1399 section 300A
- Rain:** Consult factory for this option



Rear Panel ACG3000 UPS

Contact Acumentrics to discuss customized solutions.

**RUGGED  
 RELIABLE  
 POWER™**

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

**A C G 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.

**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

