

Rugged-UPS™ 3000

CONTINUOUS OUTPUT POWER: 3000VA / 2400W



**RUGGED
RELIABLE
POWER™**

Acumentrics durable and versatile COTS Rugged-UPS™ 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.

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 Lithium Iron Phosphate (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.



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Rear Panel ACG3000 UPS



ACG3000R-XR
with Optional Extended
Battery

Contact
Acumentrics
to discuss
customized
solutions.

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INPUT SPECIFICATIONS

AC Voltage: 80-265 VAC, single phase

Frequency: 47-440 Hz

AC Circuit Breaker Rating:

50A Double Pole Breaker

DC Voltage: 22-32 VDC

Maximum DC Current: 120A

Power Factor: 0.99 typical

Efficiency with 1000W Load:

AC η = 0.86 DC η = 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 (28VDC output [no AC output])

AC Voltage: 115 VAC +/-5%

AC Frequency: 60 Hz +/- 0.5 Hz

AC Waveform: Pure Sinusoidal

DC Power (optional): 250W, 600W, 1200W or 2000W @ 24, 28 or 48 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 VRLA battery: -20°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 Module Run Times:

ACG2500XRBP:

with two LFP batteries: 30 minutes

with two VRLA batteries: 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 (DE-9/DB-9) for user interface and remote monitoring; RJ-45 SNMP is optional

OPTIONS

Consult Factory for other Standard Options and Part Number Configuration

- DC Output: 24, 28 or 48 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 – AC Output Unbonded Neutral
- Operational Transit Case (OTC)
- Fungus Mitigated Design – Includes PVC-Free Wiring and Conformal Coated Boards

STANDARDS

The Rugged-UPS™ 3000 is a COTS Rugged Mission Critical Power System for both Military/Commercial customers and 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

Audible Noise: Less than 53 dB

The ACG3000 Rugged-UPS™ works best with:

ACG2500XRBP Extended Battery Chassis



APG2500 PDU Power Distribution Unit



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

