

A NEW LEVEL OF POWER

Rugged Blade UPS™ 1501

SMALL FOOTPRINT. LIGHTWEIGHT. HIGH POWER DENSITY.

Power Has Never Been More Portable

Acumentrics uses advanced technologies in power conversion, high performance digital controls and an innovative high frequency transformer to create the Rugged Blade UPS™.

This unit offers a new level of power portability to military applications in a narrow 1U chassis, providing significant savings of rack space.

Light in Weight, Not Power

Despite being lightweight, the Rugged Blade UPS™ provides extremely high-power density. Offering 1250W of AC output power in half the space of a traditional UPS, it is one of the most powerful and compact UPS products on the market. The system can provide 1250W of continuous power from -40°C to 60°C. Some derating required at the extreme limits of specifications.

Power Factor Corrected

This UPS accepts a wide range of voltages and frequencies, while providing clean, reliable AC and DC power as well as seamless switching from AC shore power to the internal battery.

On-Line Double Conversion

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

Flo-Thru™ Technology

With Acumentrics' unique Flo-Thru™ technology and heatsink tunnel design, this UPS delivers maximum protection to components from airborne particles and other contaminants. Advanced fan controls provide the correct airflow for cooling, while minimizing noise and extending fan life.

Optional Advanced Paralleling

Advanced N+1 paralleling makes the Rugged Blade UPS™ the building block in a modular system up to 3000 VA and ensuring redundancy, fault tolerance with no system downtime – essential for mission critical applications.

RUPS Transfer Time

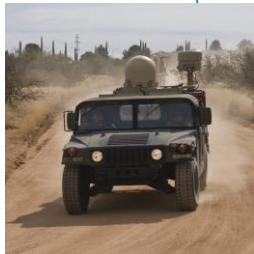
These units transfer seamlessly without interrupting the load quality and have zero switch over time.

User-Replaceable Battery Pack

The Rugged Blade UPS™ features Lithium Iron Phosphate (LFP) or valve-regulated lead acid (VRLA) batteries, enclosed in a user-replaceable battery pack for rapid hot-swap field replacement. The LFP battery pack provides a lighter weight energy source with longer shelf life and cycle life.

Accepts True Worldwide Input™

The Rugged Blade UPS™ accepts AC input power from 100 VAC to 265 VAC / 47 Hz to 440 Hz.



**RUGGED
RELIABLE
POWER™**

Reliability of communications is dependent on rugged power supplies. Acumentrics' powerful, portable COTS Rugged Blade UPS™ brings a new level of power portability to a wide range of military applications and environments. This double on-line conversion unit is packed with technology that provides high power density, continuous output power, as well as ease of installation and maintenance.



V2 COMPLIANT TO CHS4
Rugged Blade UPS™ 1501

CONTINUOUS OUTPUT POWER: 1500VA/1250W



Front Panel

**RUGGED
RELIABLE
POWER™**

INPUT SPECIFICATIONS

AC Voltage: 100-265 VAC, single phase
Frequency: 47-440 Hz
AC Circuit Breaker Rating: 20A Double Pole Circuit Breaker
Power Factor: 0.99 typical
Efficiency with 1250W Load: AC in= 82%

OUTPUT SPECIFICATIONS

Continuous Power: 1500VA (0.8PF)/1250W, parallel units for greater load carrying capability
Max Load Crest Factor: 2.15
AC Voltage: 115 VAC +/- 5%
AC Frequency: 60 Hz +/- 0.5 Hz
AC Waveform: Sinusoidal
Total Harmonic Distortion (THD): <2.5% with 1250W resistive load

ENVIRONMENTAL

Operating Temperature: -40°C to 60°C
*Some derating required at extremes
Storage Temperature: -40°C to 60°C
w/o battery: -40°C to 70°C
Storage Temperature for Optimal Battery Life: 10°C to 25°C
Humidity: up to 95% (non-condensing)
Max. Altitude: 15,000 ft. operating, 40,000 ft. non-operating

BATTERY SPECIFICATIONS

Battery Type: LFP or low maintenance VRLA
Typical 1000W Run Time: LFP 10 minutes, VRLA 4 minutes
Recharge Time: LFP 3 hours, VRLA 4 hours

MECHANICAL SPECIFICATIONS

Chassis Size (H x W x D): 1.75" x 17" x 21.75"
Envelope size (H x W x D): 1.75" x 19.5" x 24.6"
Weight: w/o battery pack: 20 lbs.
with VRLA: 33 lbs. with LFP battery: 28 lbs.

COMMUNICATION PORT

9-pin (DB-9) for user interface and remote monitoring; SNMP v3 is optional

AC OUTPUT CONNECTORS

ANB1501RNLIC1 Base model:
Up to 5 NEMA 5-20R, 4 critical, 1 non-critical

ANB1501RPNLIC1 N+1 fault tolerant model:
Up to 3 NEMA 5-20R, 2 critical, 1 non-critical

OPTIONS

Consult Factory for other Standard Options and Part Number Configuration

- **Rackmount Accessories**
- **Parallel Operation for Loads up to 3kVA**
- **Simple Network Management Protocol V3**
- **Shipboard** – AC Output Unbonded Neutral
- **Operational Transit Case (OTC)**
- **Fungus Mitigated Design** – Includes PVC-Free Wiring and Conformal Coated Boards

STANDARDS

The Rugged Blade UPS™ is a COTS Rugged Mission Critical Power System for both Military/Commercial customers and is tested/designed to meet the following standards:

EMC: MIL-STD-461-F: RE102, CE102, CS101, CS114, CS115, CS116, RS103

Environmental: MIL-STD-810-G: 500.4, 507.4, 514.6, 516.6

MIL-HDBK-704: SAC101, SAC102, SAC103, SAC104, SAC105 SAC106, SAC107, SAC108, SAC109, SAC110, SAC201, SAC301, SAC302, SAC303, SAC401, SAC601, SAC603

RTCA/DO-160: 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 5.0.2, 6.0.2, 7.2, 7.3.1, 7.3.2

Shipboard: MIL-STD-1399 section 300A



ANB1501RNLIC1, 4 Critical AC Out, 1 Non-Critical AC Out



ANB1501RPNLIC1 N+1 fault tolerant model

Acumentrics Rugged Blade 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**