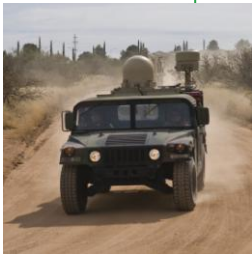


A NEW LEVEL OF POWER
Rugged Blade UPS™ 1251

SMALL FOOTPRINT. LIGHTWEIGHT. HIGH POWER DENSITY.



**RUGGED
RELIABLE
POWER™**

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 1000W of AC or DC 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 is rated to provide 1000W of continuous power from -20°C to 60°C (with LFP battery pack option). Some derating may occur 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 DC power to the internal battery.

On-Line Double Conversion

The Rugged Blade 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.

Flo-Thru™ Technology

With Acumentrics' unique Flo-Thru™ technology and heatsink tunnel design, this UPS delivers maximum protection to components from blown precipitation, 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 for up to 10kVA and ensuring redundancy, fault tolerant with no system downtime – essential for mission critical applications.

Dual Input with Automatic Power Selection

A Rugged Blade UPS™ with AC or DC input prioritizes AC shore, then DC input and then internal battery power sources. In the event of loss of AC power the external DC input takes precedence over the internal battery, which provides back up power if both AC and DC input power is lost.

RUPSTransferring

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

User-Replaceable Battery Pack

The Rugged Blade 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. 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 80 VAC to 265 VAC/47 Hz to 440 Hz, as well as DC input from 20 VDC to 32 VDC. At 20 VDC some derating may occur.



Reliability of communications is dependent on rugged power supplies. Acumentrics' powerful, portable Rugged Blade UPS™, than most UPS products, bringing 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™ 1251

CONTINUOUS OUTPUT POWER: 1250VA/1000W



Front Panel



Rear Panel

Contact Acumentrics to discuss customized solutions.

**RUGGED
 RELIABLE
 POWER™**

INPUT SPECIFICATIONS

AC Voltage: 80-265 VAC, single phase
Frequency: 47-440Hz
AC Circuit Breaker Rating: 20A
DC Voltage: 20-32 VDC
Maximum DC Current: 70A
Power Factor: 0.99 typical
Efficiency with 1000W Load:
 AC η = 0.83 DC η = 0.82

OUTPUT SPECIFICATIONS

Continuous Power: 1250VA/1000W
 parallel units for greater load carrying capability
Load Crest Factor: 2.15 continuous
Peak Current: 19A (1000W AC output)
AC Voltage: 115 VAC +/- 5%
AC Frequency: 60Hz +/- 0.5Hz
AC Waveform: Sinusoidal
Total Harmonic Distortion (THD):
 <1.5% with 1000W resistive load

ENVIRONMENTAL

Operating Temperature:
 with LFP battery: -20°C to 60°C
 with Lead Acid 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
Rain: Operates in blown precipitation

MTBF: >75,000 hours over temp. range (>50°C)

BATTERY SPECIFICATIONS

Battery Type: LFP or low maintenance VRLA
Typical Run Times: LFP 10 minutes, VRLA 4 minutes
External Battery Run Times: LFP 30 minutes, VRLA 12 minutes
Recharge Time: LFP 3 hours, VRLA 4 hours, External Battery 5 hours

MECHANICAL SPECIFICATIONS

Chassis Size (H x W x D): 1.75" x 17" x 21"
Envelope size (H x W x D): 1.75" x 19.5" x 24.75"
Weight: w/o battery pack: 20 lbs
 with lead acid battery: 33 lbs
 with LFP battery: 28 lbs

COMMUNICATION PORT

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

OPTIONS

- **DC Output: 24, 28 or 48 VDC Output**
 DC only unit delivers up to 1000W of DC power.
 Unit with AC and DC offers up to 500W of DC with remaining output AC (Total power DC+AC <= 1000W).
 Other wattages available with customized units.
 28VDC Output accuracy: +/- 2% (+/- 4% incl. droop)
 ripple: +/- 200mV 20Mhz BW
- **AC Output: 230 VAC 50 Hz Output**
- **Rackmount accessories**
- **External DC Input**
- **External Battery Pack(s)**
- **Parallel Operation for Loads up to 10kVA**
- **Simple Network Management Protocol Version - V3**
- **Shipboard** – Double-pole circuit breaker approved for use with shipboard Delta power

STANDARDS

The Rugged Blade UPS™ 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 (At customer request)
Environmental: MIL-STD-810-G

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

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 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**

