

## Sustainment Systems Power Solutions



DRS Pivotal Power's 2.4 kW Uninterruptible Power Supply (UPS) system is intended for use on board naval combat ships to power critical command, control, communication and navigation equipment. The input to the 3 kW UPS system is supplied from the ship's 440 V, 60 Hz, 3-phase AC service power conforming to MIL-STD-1399, Section 300. The UPS system provides isolated 28 VDC.

In the event of loss of ship service power, the UPS system continues to provide the output power for a specified time using rechargeable storage batteries. Upon restoration of ship service power, the UPS system automatically reverts to input power from the ship service power to provide the output power and to charge the storage batteries. The transition between ship service and battery power is achieved with less than 2% harmonic distortion. The UPS also functions as a power conditioner, blocking surges, spikes and transients while maintaining stable voltage to the serviced equipment.

Each UPS system is made up of a power unit, which houses the power electronics, and control and communication circuits, and a battery unit, which houses the storage batteries. The UPS system utilizes mil spec circular connectors for input, output and battery unit connection. DRS Pivotal Power manufactures a full line of battery units to support the UPS system for various backup durations.

The UPS power units are fully Simple Network Management Protocol (SNMP) compatible, offering effective computer network management of the UPS either independently, or as part of a larger distributed power system. When enabled, the SNMP can remotely control various functions of the UPS and monitor a large number of status and system variables.

The UPS is fully qualified for military applications.

DRS PIVOTAL POWER



## Features

- Mean Time Between Failures (MTBF) - 40,000 hours
- Isolation switches for input, output and battery
- SNMP communications and control options
- Draw-out subassemblies and printed wiring boards
- Built-In-Test (BIT) capability
- Online maintenance of batteries and battery charger
- Key system LED status indicators
- LCD status display

## Input

Voltage . . . . . 440 VAC nominal, 3 phase  
Frequency . . . . . 60 Hz nominal

## Output

Voltage . . . . . 28 VDC, single phase  
Power rating . . . . . 2.4 kW  
Power backup time . . . . . numerous durations available  
Efficiency . . . . . 80% at rated load  
Number of output connectors . . . . . two

## Environmental

Operating temperature . . . . . 10°C to 50°C / 50°F to 122°F  
Humidity . . . . . up to 95%  
EMI/EMC . . . . . MIL-STD-461D, CE101, CE102, CS101, CS114, CS116, RE101, RE102, RS101, RS103  
Vibration . . . . . MIL-STD-167/1, Type 1, 4 Hz to 33 Hz  
Shock resistance . . . . . MIL-S-901D, Grade A, Class I, Type A  
Airborne noise . . . . . MIL-STD-740-1, Grade A12  
Cooling method . . . . . forced air convection

## Physical

Dimensions . . . . . 10.5 L x 20.5 W x 28.6 H inches (bulkhead)  
28.6 L x 19.3 W x 8.9 H inches (5U) (rack)  
267 L x 521 W x 726 H mm (bulkhead)  
726 L x 490 W x 226 H mm (5U) (rack)  
Weight (excluding batteries) . . . . . 163 lbs. (max)  
74 kg (max)

Specifications subject to change without notice.

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