



#### **Features & Benefits**

- Rugged and Reliable
- Transportable, stand-alone unit
- Ease of Setup and Use
- Eliminates Hazardous Workarounds
- Reduced Overall Logistical Footprint
- Centralized Power Distribution
- Load balanced to generator increasing generator reliability and efficiency
- 100-208 VAC, 12-24 VDC, and battery UPS balanced across three phases

# Balanced Three Phase Power Distribution Unit (PDU)

The Power Distribution Unit (PDU) distributes the power draw evenly across the three phases of input power from the generator. The PDU's capability to balance across 3-phases, in a small form factor, prevents overloading or damage to critical electrical equipment and increases the efficient use of power. The PDU provides balanced, 3-phase power in all environments providing conditioned AC and DC power to critical components while extending the life of tactical generator sets. The balanced load across the three phases eliminates generator instability and generator motor vibration that would reduce power efficiency and the life of the generator.

The PDU balances 3 phases of 208VAC input power from a generator or shore power and outputs AC power to two 240VAC loads, one 120VAC load and an AC/DC power support equipped with an Uninterrupted Power Supply (UPS). The PDU provides transient suppression, filters to the AC and DC power, and distributes AC and DC power.

It also has a convenience outlet for setup equipment such as a hammer drill and laptop.



## Balanced Three Phase Power Distribution Unit (PDU)

#### **Specifications**

Low Volume and Weight

8U height, 19" rack-mount chassis, 23" depth, 110

Transit case required for full EMI / HEMP compliance

With rack-mount transit case: 152 lbs (2-man carry, 3-person carry)

Electrical Characteristics	
Input	180-260 VAC, 50-60 Hz, 3-phase, 10kW / 40A max, WYE
	Load shared equally across the three input phases, with a 10% tolerance
	Total input not to exceed 10kW
Output 1/2	Two 240 VAC, 1 phase output (independent rails), 3 kW each
Output 3/4	Two 110 VAC, 1-phase output (single-rail), 1.5 kW max combined
	- 500W limit when both 240VAC outputs are providing max power
Output 5/6	Two 28 VDC (single rail), 500W max combined
Overall Efficiency	>95%
Battery Backup	Maintain 28VDC, 500W output rail for at least 90 minutes



Operating Environment		
System Temperature	-40°C to 50°C	
Exposures	(IP65 equivalent) Tested to meet MIL-STD-810G Blowing Rain, Blowing Sand, Ice	

#### Management and Control (M&C)

Voltage and current readings on each input and output rail

Available front-panel display and user input

Available serial console, in both RS-232 & RS-422 formats

### Electromagnetic Interference (EMI) / High Altitude Electromagnetic Pulse (HEMP) compliant construction

Tested to meet MIL-STD-461G: CE102, CS101, CS114, CS115, CS116, RE102, RS103

Tested to meet MIL-STD-464C: Near-Strike Lightning

Designed to meet MIL-STD-188-125-2: EMP



Rear View



Exploded View, Removable Battery Assembly



Hemp hardened case