

Tecknowledgey Inc. 8 John Walsh Blvd Peekskill, NY 10566

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AC Power Supplies

PWS1510MS Series C.O.T.S. Power Supply

Benefits

- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation
- Clean, Precise Power



Military Option

- Military / COTS Applications
- Marine & other rugged environments
- Electric Utilities and Substations
- Base Station Power (Radio & Telecommunications)
- OEM Applications
- Field Work / Construction Sites
- Solar Power Systems
- Emergency Power Backup (UPS)



GSA Contract #GS-07F-5624R

Description

The PWS1510 Power Supply provides up to 600 watts to power a 12, 24 or 28 Volt Electrical system from a 110 or 220VAC source.

This all-new single board design incorporates state of the art switchmode technology for unmatched efficiency and ultra-quiet operation. Multiple stages of filtering reduce radiated or conducted noise to very low levels to meet MIL461E. Extra features include visual indicators for output ON and output overload (single dual brightness LED). Safety features include over-temperature shutdown, current limiting, short circuit protection with automatic recovery, input undervoltage shutdown and output overvoltage crowbar.

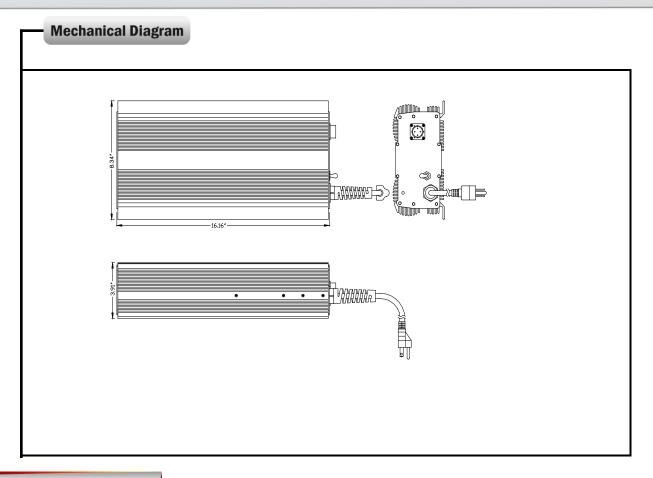
Optional features include a Full Battery Charger version, a 3-Bank Load Splitter and/or a temperature compensated charging sensor. We are confident that you will get many years of reliable service from this AC Power Supply.

Features

- Ideal as a COTS Power Supply for Military Applications
- Military-Grade extrusion ensures a high tolerance for shock and vibration
- Ultra-quiet low EMI operation
- Can be left permanently connected
- 3 Bank Load Splitter Available
- Battery Charger version Available
- Visual indicators for output and charging
- Identical to NSN # 7310-01-502-9455 with additional auto-ranging input capability

- Short circuit protection
- Output over-voltage crowbar
- Inrush Current Limiting with solid state bypass
- 110/220 Vac auto-ranging input
- Built to IP66
- 3 year parts and labour warranty
- Designed to meet MIL-STD 810F, Method 514-3, Cat-I Proc I for vibration
- Built to the Q-Base Quality System Standard

PWS1510MS Series Power Supply



Specification

Electrical (Input)

| Nominal Vac (ip) | 110 to | 220 |
|------------------|------------|---------|
| Actual (Vac) | 105-125 to | 210-250 |
| Input Amps (max) | 16.2 | 8.1 |
| Input Fuse (MDA) | 25A | 15A |
| Input Frequency | 45-65 Hz | |
| Noise on Input | < 50 mV | |

Environmental Specification

| Operating Temp. Range | -40° to +50°C @ maximum output Derate Linearly 2.5% per °C from 50°C (Optional -40°C extra wide temp. operation avail.) |
|-----------------------|---|
| Humidity | 0 - 95°C Relative Humidity (non-condensing) |
| Audible Noise | NONE – Ø db @ 3 ft |
| Typical Service Life | > 10 yrs. (87,600 hrs) |
| Isolation | Input-Case & Input-Output 1500VDC / Output-Case 500VDC |
| Vibration | |

Electrical (Output)

| Output Nominal (op) | 12 24 | |
|-----------------------------|---|--|
| Output Volts (DC) | 13.6 27.2 | |
| Output Current (Cont. Amps) | 52A 26A | |
| Output Fuses (ATC) | 40 x 3 40 x 2 | |
| Output Crowbar | $16.0 \pm 0.5 \text{V}$ $32.0 \pm 1.0 \text{V}$ | |
| Output Ripple & Noise | < 50 mV | |
| Regulation (Line & Load) | < +/- 0.5% | |
| Duty Cycle | Continuous 100% for 24 hours per day | |
| EMC | Designed to meet MIL461E | |
| Efficiency | > 80% @ Maximum Output | |

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Mechanical Specification

| Length | 16.0 in / 40.64 cm |
|-------------|---|
| Width | 7.5 in / 19.1 cm |
| Height | 3.5 in / 8.9 cm (without carrying handle) |
| Clearance | 1 inch (2.5 cm) all around |
| Material | Marine Grade Aluminium |
| Finish | Clear Chromate |
| Fastenings | All 18-8 Stainless Steel |
| Weight | 16.6 lb / 6.2 kg |
| Connections | Four contact output terminals |
| Warranty | 3 years |
| Safety | Designed to meet UL458 & CSA 22.2.107.1 |

