WORLDWIDE RUGGEDIZED POWER SUPPLY

WRPS 1800

DESCRIPTION

CME's Worldwide Ruggedized Power Supply (WRPS), is an advanced power supply unit with an output of 1800 watts, meeting rugged, field requirements for providing portable electric power to energize DC powered communications equipment, or other electronic peripheral equipment in mobile, tactical, or remote environments.

The WRPS 1800 provides maximum performance and addresses acute DC power supply demands in the field. The rugged design and completely sealed unit incorporates mechanical shock protection for reliable day-to-day power in rugged terrain or operational environments. The WRPS 1800 can be transported, setup and operated by one person, and is adaptable to multiple power sources (US & EU).

APPLICATIONS

The WRPS 1800 meets the demands for DC power in almost any difficult environment. If you have a need for power at locations below 15,000 feet, and within the temperature range of -40ºF to 131ºF (-40ºC to 55ºC), the WRPS 1800 is what you need. The WRPS 1800 also meets rigorous environmental requirements for resistance to salt fog, sand, dust, humidity, shock, and impact.

WRPS 1800 is ideal for providing quiet, reliable power in military or homeland security operation centers, command posts, headquarters, and encampments, for radios, and other military electronics or sensors.

- Bench-top power supply for 28V electrical loads
- Military radio-telephone operators
- Homeland security radio-telephone operators
- Signal/Communication units.

KEY FEATURES & BENEFITS

PHYSICAL

- One person transport, setup, and operation
- Weighs 33 lbs; approximately 20 lbs less than requirement. Meets MIL-STD-1472F
- Small footprint, 1776 cubic inches (9.0 in. W x 12.6 in. H x 15.6 in.)
- Extremely reliable; unit is enclosed, sealed, and ruggedized with shock protection

OPERATIONAL

- LED display for reading voltage output adjustments
- Resettable circuit breakers on front panel for AC input and DC output protection
- Comes with three, 6-foot power cords, residing in rear panel

LOW MAINTENANCE

- Sealed unit
- No tools, no calibration required
- Minimal preventative maintenance
- 1-year warranty

Custom Manufacturing & Engineering™ ISO 9001:2008 & AS9100:2009 Registered ♦ ISO/TS 16949 Conformance♦
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SPECIFICATIONS

INPUT POWER

- 85 to 250 Volts AC, 47 to 63 Hz. Input Connectors MS-3102R22-2P
- Full output power with 110 Volts AC at 20 amps input
- 20 AMP Resettable breaker on input for protection
- Three AC input power cords are 6 feet for 15A and 20A
- North America service and 16A European service
- Input connection labeled J1 with the connector is an MS3102R22-2P

OUTPUT POWER

- Manually adjustable output voltage from 18 to 30 VDC
- Voltage setting is lockable at a given set point
- Continuous current from 0 to 60 amperes
- Load regulation for no-load to full-load excursions: ±0.3 VDC regulation
- Output voltage regulation ± 0.5 volt across input voltage & operating temperature range
- Output ripple less than 100 mV over 0 to 60 amps
- Output voltage drift of less than 1% over 8 hours at constant line, load and temperature
- Protection from input power transients
- Full output power available at the front panel
- Voltage manually adjustable over entire output range
- No tools or instruments required for adjustments
- Over voltage protection included; and 60 AMP resettable breaker for output protection

ENVIRONMENTAL

- Operational temperature range: -40ºF to 131ºF (-40ºC to 55ºC)
- Storage temperature range: -59ºF to 160ºF (-51ºC to 71ºC)
- Altitude range: Up to 15,000 feet.
- Meets functional transit shock per MIL-STD-810G, 516.6 Procedure IV
- Sealed case meets sand and dust, humidity, drip, and salt fog per MIL-STD-810G
- Conforms to EMI performance requirements for CE102, RE102 and RS103 of MIL-STD-461F
- WRPS 1800 withstands the impact forces encountered in shipping, ref MIL STD 810G 514.6,
- Procedure I and II – Loose Cargo Bounce Test
- Ergonomic handle for easy transport and lift, meets MIL-STD-1472

SUPPORTABILITY

- WRPS 1800 identification plate meets Item Unique Identification (IUID) requirements
- Warranty provided from time of shipment.
- Operator and Maintenance Manual includes all necessary information to operate and perform preventive maintenance and repair
- Mean time between failure of 100,000 hours
- Mean time to repair of 2 hours or less

SAFETY & HUMAN FACTORS

- Protects operator from inadvertent contact with voltages
- LED displays for voltage and current over entire temperature range and environmental conditions displaying in tenths of a unit
- LED displays for output voltage and current 1% display accuracy
- Permanent warning labels to warn of hazards