INCH-POUND

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November 5, 2009

COMMERCIAL ITEM DESCRIPTION

DIRECT CURRENT (DC) POWER SUPPLY

The General Services Administration has authorized the use of the Commercial Item Description (CID) for all federal agencies.

1. SCOPE. This Commercial Item Description (CID), describes a 60 Watt, manual, single output DC power supply. This is a single output DC power supply power that includes a digital panel meter for monitoring voltage and current simultaneously. This CID is meant as a minimum requirement for a 60 Watt, single output, DC power supply in which only those manufacturers that meet or surpass the following requirements are qualified per this CID.

2. SALIENT CHARACTERISTICS. The equipment shall be capable of operation within the accuracies, limits, and specifications herein.

2.1 Classification. Equipment covered by this CID shall be commercially available equipment and may modified to the extent necessary to meet the following description. The equipment shall be Class 3, in accordance with MIL-PRF-28800.

2.2 Safety. The equipment shall be UL (Underwriters Laboratories) listed and approved and/or shall comply with the safety requirements of MIL-PRF-28800 for the classification stated herein.

2.2.1. Leakage Current Protection. Protection shall be provided from leakage current in excess of 3.5 milli-amperes (mA) rms (AC and DC) from any accessible conductive parts of equipment (including control shafts with knobs broken or removed and recessed calibration or adjustment controls) to either pole of the power source for any position of the power switch(es).

2.3 Electrical Power Sources. The equipment shall operate from nominal single-phase commercial power source of 115Vac ±10% at line frequencies of 50 Hz or 60 Hz.

2.3.1 Power Consumption. Maximum power consumption of all components combined shall not exceed 70 watts.

2.4 Dimensions and Weight. The equipment shall be no larger than: 4.0 inches high, 9.0 inches wide, and 16 inches deep. The weight including all accessories (excluding manual) shall not exceed 20 lbs.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any other data that may improve this document should be sent to WR-ALC/742 CBSG/GBEC, 460 Richard Ray Bvld, Robins AFB, GA 31098-1813. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at http://assist.daps.dla.mil .

2.5 Options.

2.5.1 Reusable Pouch Or Container. An attached accessory pouch may be used for storage of all supplied accessories in lieu of front-cover storage.

2.6 Reliability. Reliability verification testing shall be in accordance with the requirements of MIL-PRF-28800 for the classification stated herein.

2.7 Calibration And Maintenance Adjustments. The design of the system shall provide for readily accessible calibration adjustments and maintenance adjustments. These adjustments shall be provided by variable value components, which are adjustable, by the use of simple means. The calibration by substitution of selected components or parts is unacceptable unless specifically approved. The calibration adjustments, wherever possible, shall be accessible without removal of the instrument case or modules.

2.8 Performance Characteristics. The instrument shall meet all performance requirements specified herein.

2.8.1 Voltage. The voltage range shall be a minimum of 0-35 VDC in a dual or single range selectable from the front panel.

2.8.2 Operating Temperature Range. The equipment shall meet its performance and accuracy requirements in an operating environment of 0º C to 40º C.

2.8.3 Transient Response Time. The transient response time shall be less than 50 µs following change in output current from full load to half load for output to recover to within 15 mV.

2.8.4 Load Effect. The load effect on the power supply shall be no greater than ±0.01% + 5mV for load variation from 0 to full load.

2.8.5 Line effect. The line effect on the power supply shall not be greater than ±0.01% + 5 mV for line voltage variance of 105V to 125 VAC.

2.8.6 Ripple and Noise. The ripple and noise shall not exceed 200 µV rms, 1 mV peak to peak with plus or minus terminal grounded.

2.8.7 Meter Accuracy. The meter accuracy shall be ±0.5% + 2 counts at 25º Celsius.

2.8.8 Meter Resolution. The voltage resolution shall be 10 mV for the 0 to 20V range and 100 mV for all others. The current resolution shall be 1 mA.

2.8.9 Isolation. The outputs shall be capable of being floated up to 240V from ground.

2.8.10 Manuals. The analyzer shall be delivered with operator, maintenance, and illustrated parts manuals. Format and quantity shall be as specified in the contract or order.

3. REGULATORY REQUIREMENTS

3.1 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible provided that the material meets or exceeds the operational and maintenance requirements, and promotes economically advantageous life cycle costs. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

3.2 Green Procurement Program. Green Procurement Program (GPP) is a mandatory federal acquisition program that focuses on the purchase and use of environmentally preferable products and services. GPP requirements apply to all acquisitions using appropriated funds, including services and new requirements. FAR 23.404(b) applies and states the GPP requires 100% of EPA designated product purchase that are included in the Comprehensive Procurement Guidelines list that contains recovered materials, unless the item cannot be acquired: a) competitively within a reasonable timeframe; b) meet appropriate performance standards, or c) subcontractors comply with this requirement.

4 PRODUCT CONFORMANCE PROVISIONS.

4.1 Product Conformance. The products provided shall meet the salient characteristics of this CID, conform to the producer's own drawings, specifications, standards and quality assurance practices, and be the same product offered for sale in the commercial market. The government reserves the right to require proof of such conformance.

4.2 Metric Products. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch-pound units, provided they fall within the specified tolerances using conversion tables contained in the latest revision of Federal Standard No. 376, and all other requirements of this CID are met. If a product manufactured to metric dimensions exceeds the tolerances specified in the inch/pound units, a request should be made to the contracting officer to determine if the product is acceptable.

4.3 The contracting officer has the option of accepting or rejecting the product.

5. PACKAGING. Preservation, packing, and marking shall be as specified in the contract or order.

6. NOTES.

6.1 Sources of documents.

6.1.1 Military Specifications, Standards, and Handbooks referenced herein may be obtained at http://assist.daps.dla.mil or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.

6.1.2 FAR and DFARS may be obtained from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Electronic copies of the FAR may be obtained from http://www.arnet.gov/far/ . Electronic copies of the DFARS may be obtained from http://www.acq.osd.mil/dpap/dars/dfars/index.htm .

6.2 Key Words.

Accessible calibration
Accessory pouch
Range selectable

MILITARY INTERESTS:

Custodian:
Air Force – 99

Preparing Activity:
Air Force - 84

Agent:
Air Force - 99

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