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COMMERCIAL ITEM DESCRIPTION
TEST SET, RADAR PRESSURIZING (PORTABLE, SHOCK MOUNTED)

The General Services Administration has authorized the use of this commercial item description (CID), for all federal agencies.

1. Scope. This commercial item description is for a Radar Pressurizing Test Set, capable of use with 26±6 VDC and/or 110VAC 60/400Hz. The set should meet form, fit and function as follows.

2. SALIENT CHARACTERISTICS.

2.1 Nominal physical characteristics.

2.1.1 Dimensions. The unit shall have a volume no greater than 12.5”H x 14.5”L x 9.5”.

2.1.2 Weight. The unit shall weigh no more than 30 pounds.

2.2 Capabilities. All of the following requirements shall be met or exceeded.

2.2.1 Moisture control. The design shall ensure, that when providing positive pressure to radar equipment, output air contains humidity less than or equal to 40 percent relative humidity under normal operating conditions.

2.2.2 On board pump. The design shall include an air pump capable of delivering a minimum of 1.0 cubic feet of free air per minute at 32 in-Hg absolute discharge pressure, with sea-level defined as 29.92 in,-Hg.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any other data that may improve this document should be sent to FSC: 4920 – WR-ALC/GRVEC, 460 Richard Ray Blvd, Suite 200, 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 https://assist.daps.dla.mil/ .

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2.2.3 Push to bleed valve. A push to bleed valve shall be provided to relieve pressure in the system. Releasing the valve shall automatically stop air bleeding. The valve shall be placed in a conspicuous place on the design and be properly and conspicuously labeled such that the user is able to quickly and easily identify and use it.

2.2.4 Operating voltage. The design shall be capable of power via a 26±6 VDC source or an 110VAC, 60Hz/400Hz source.

2.2.5 Engineering units of pressure indication. The design shall be capable of indicating pressure in units of inches of mercury (in-Hg) and pounds per square inch absolute (PSIA).

2.2.6 Casing and transportability. The design shall be able to be carried by one person. The unit must be ruggedized and must not be damaged in the course of normal use or in transport as non-secured ground cargo or as secured cargo. The limitations of the shock mounting and transportability must be provided with the unit as a marking on the unit or be specified in the manual.

2.2.7 Hoses and cables. The connecting hose shall be at least 10 feet in length. The power cord shall be at least 15 feet in length. The connecting hose and the power cord shall be stowed in such a manner that they shall be transported within the casing. Both shall be user replaceable. The hose shall connect to the unit under test which shall have a male -4AN connector per MS33656 style G. The power connector shall use a standard 110VAC, 60 Hz North American Type A or North American Type B male electrical connector when powered by an 110VAC, 60Hz power source. The connector shall be an MS3106A14S-9S or equivalent connector when using a 26±6 VDC source.

2.2.8 Vacuum and pressure selection. The unit shall be capable of performing both pressurization (positive pressure) and vacuum (negative pressure) tests. Pressurization or vacuum test type shall be user selectable at time of use.

2.2.9 Pressure indicator. The pressure shall be indicated with a range of at least 10 to 100 in-Hg (0-50 PSIA) absolute positive or absolute negative pressure as selected by the user. The indicator must operate in a manner such that it can be used to check leakage. The indicator shall have an indication resolution of at least 1.0 in-Hg (0.5 Hg) and accuracy to within 0.5 in-PSIA (0.25 PSIA).

2.2.10 Clock. A start, stop, reset-type clock shall be include to check leakage rates. It shall indicate hours, minutes, and seconds.

2.2.11 On-off switch. The On-Off switch or button shall include a momentary on position, which when placed in the momentary on position shall default to the off position when the switch or button is released.

2.2.12 Power and use indications. The unit shall include a power indicator that will display when power is connected to the unit. The unit shall include use indication that will display the position of the on-off switch or button when it is in on or momentary on position.

2.2.13 Electromagnetic interference (EMI). The test set shall comply with the EMI requirements shown in Table I.

TABLE I. Electromagnetic interference (EMI)

Name	**Description**	**Parameters**
SAE J551-1	Compatibility	N/A
CISPR 12 & CISPR 25	Emissions	(Frequency Range: 30 to 1000 MHz)
SAE J551-11	Susceptibility	(Frequency Range: 100 kHz to 18 GHz) 20 V/m (100 kHz to 200 MHz) 50 V/m (above 200 MHz)

2.2.14 Maximum pressure control. The unit shall be capable of automatically shutting off the pump at 60 in-Hg absolute and resume operation at 54 in-Hg absolute when selected. The output pressure shall be automatically cut off at 95 in-Hg absolute (adjustable) to prevent over pressurization.

2.2.15 Leakage. The unit shall include a check valve or other method to prevent air leakage back through the test unit.

2.2.16 Test Usage. The unit shall be capable of use for vacuum decay, vacuum occlusion, pressure decay and pressure occlusion tests.

2.2.17 Tools. The unit shall require only common hand tools for operation. Access to the internal mechanisms of the unit shall not be required for normal use. Pre-operational inspections shall not require tools.

2.2.18 Compatibility. The unit shall be compatible with clean dry non-corrosive gasses compatible with aluminum and 316 stainless steel.

2.2.19 Calibration. The unit shall not require calibration, under normal usage, at an interval shorter than 12 months. Calibration procedures shall be provided in a manual with the unit.

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) at a reasonable price. The prime contractor is responsible for ensuring that all subcontractors comply with this requirement.

4.0 PRODUCT CONFORMANCE PROVISIONS

4.1 Product conformance. The products provided shall meet the salient characteristics of the 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. Proof of conformance may include, but shall not be limited to the performance of operational tests, lab tests, modeling and simulation and delivery of reports and data from these tests.

5.0 PACKING

5.1 Preservation, packing, labeling, and marking. Shall meet requirements as specified in the contract or order.

5.2 Packaging and marking. In the absence of specific instructions in the contract or order, the manufacturer's standard commercial packaging and marking practices will be used.

5.3 Unique identification (UID). The RPTS shall be uniquely identified. The markings shall meet MIL-STD-130M requirements.

6.0 NOTES

6.1 Standard Commercial Warranty. The contractor must extend to the Government the same warranty as that which is offered to the contractor's commercial customers unless otherwise negotiated by the Government.

6.2 Source of documents.

6.2.1 Military Specifications, Standards, and Handbooks referenced herein may be obtained at https://assist.daps.dla.mil/ . or available from the Standardization Documents Order Desk, 700 Robbins Ave, Bldg 4, Section D, Philadelphia, PA 19111-5094.

6.2.2 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 https://www.acquisition.gov/far/ . Electronic copies of the DFARS may be obtained from http://www.acq.osd.mil/dpap/dars/dfars/index.htm .

6.2.3 SAE INTERNATIONAL documents may be obtained at http://www.sae.org/servlets/index or from SAE, Inc., 400 Commonwealth Drive, Warrendale PA 15096.

6.2.4 Comité International Spécial des Perturbations Radioélectriques (CISPR) document may be obtained online at http://www.iec.ch/zone/emc/emc_cis.htm.

6.2 Key Words

Bleed valve
Moisture control
Pressure indicator

MILITARY INTERESTS:

Custodians:
Air Force – 84

Preparing Activity:
Air Force – 84

Reviewers:
Air Force – 99

Agent:
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