

**PRASAR BHARATI
BROADCASTING CORPORATION OF INDIA
DIRECTORATE GENERAL:ALL INDIA RADIO
(PLANNING & DEVELOPMENT UNIT)**

FN: 27/12/2(RF cable 3"/3-1/8'')/2008-D(TD/FM)

**SPECIFICATION FOR RF COAXIAL AIR DIELECTRIC CABLE
(PRESSURIZED) OF SIZE 3"or 3-1/8" AND DEHYDRATOR.**

Specification No: RF cable & Dehydrator / November /2008/-D(TD/FM)

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N.B. :

- 1. The Tenderer shall submit schedule of material /requirement of Supply *without price as in Section III* of AIR Specification (two bid system i.e. technical bid and commercial bid).**
- 2. Each statement of this specification has to be complied with & supported by printed literature/data sheets from the manufacturer of the equipment by the tenderer, without which tender will be considered incomplete & is liable to be rejected. The tenderer should make a detailed offer.**
- 3. All the technical details, Schematic drawings and schedule of requirement/material must be submitted and enclosed with the tender, failing which the tender is liable to be rejected.**

4. The tenderer shall submit the tender offer to AIR in the format given below:

Sr. No. of AIR Spec. Section wise & Clause wise	Details of AIR Spec.	Make & Model No of the Equipment offered	Compliance Yes/NO	Ref to tender page No.	Remarks
Section- I					
Section-II					
Section-III					

5. The complete technical compliance must be signed & stamped by the Original Equipment Manufacturer(OEM) of the equipment in the tender document. In case tender offer is from other than the Original Equipment Manufacturer, the tenderer must also sign & stamp each page of the compliance statement. The OEM & tenderers shall fill up their name in CAPITAL LETTERS, full address with pin code, phone number, fax number, e-mail address and with their full signatures, failing which the tender shall be liable for rejection.

SECTION - I

GENERAL SPECIFICATION:

- 1.1 **Please refer tender documents (instructions to bidders) for general term and conditions of contract for supply including all the commercial aspects** like ; Packing and Packing List, guarantee, Insurance and Marine Risk etc., Payment terms, Penalty/Compensation for Delay, Damages and Liabilities, Time Period and Extension for Delay , Foreclosure of Contract due to Abandonment or Reduction in Scope of Supply , Cancellation of Contract in Full or Part, Recovery of Security Deposit, Performance Guarantee, Unsatisfactory Workmanship, Damages Incurred During transit, Tenderer's Liability for Damages, Defects, Recovery of Compensation, Ensuring Payment and Amenities, Tenderer to Indemnify Government against Patent Rights, Release of Security Deposit, Safety Code, insurance from manufacturer's works/factory to respective site etc i.e. in totality.
- 1.2 **INSPECTION:** RF Cable & Dehydrator will be accepted on the basis of manufacturer's test Certificates as per Standard International manufacturer's practice and receipt of material as per Supply Order.
- 1.3 One printed & duly bound set of Installation, Commissioning, Operation & Maintenance manuals along with manufacture's test Certificates as per Standard International manufacture's practice for complete RF cable (pressurized) & Dehydrator shall be as per details given below:
- (i) Director Engineering (Project), P&D Unit DG AIR New Delhi.
 - (ii) Station Engineer, All India Radio, Almora for Bageshwar site-**consignee**.
 - (iii) Station Engineer, All India Radio Ujjain for Ujjain site-**consignee**.
- All the details should be complete and exhaustive. One Soft copy of these documents is also required on CD for use with PC.
- 1.4 **DELIVERY** : Within three months from date of placing of order.
- 1.5 **ISO Certification** : The Tenderer should either be original equipment manufacturer or supply the equipment only from the original equipment manufacturer. Original manufacturer(s) should have ISO certification for the manufacturing work and the documentary proof for all above are to be enclosed by the Tenderer with the Tender.
- 1.6 All information submitted by the Tenderer & all markings, notes, designation on the design, drawing documents & associated write-ups shall be in "English language" only. All dimensions and units on drawings and all references to weights and measures shall be in MKS.

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- 1.7 Descriptive information giving complete details of each item offered shall be given by the Tenderer.
- 1.8 Make, model and type of individual units along with printed technical details shall be given by the Tenderer.

SECTION - II (TECHNICAL SPECIFICATIONS)

2.1 RF Coaxial air dielectric feeder cable of size 3”or 3- 1/8”(nominal) (PRESSURIZED)

S. No.	Technical Parameter	TECHNICAL SPECIFICATION
(i)	Size	3” or 3-1/8” (nominal), RF coaxial air dielectric, Feeder Cable.
(ii)	VSWR	≤1.1:1.0
(iii)	Attenuation at 108 MHz	≤ 0.50 dB/100M
(iv)	Average Power handling capability at 108 MHz	≥ 40 KW at 40° C
(v)	Frequency Range	88-108 MHz
(vi)	Impedance	50 Ohm

Actual Cable length will be intimated at the time of order however feeder cable length may be considered as tentative as given in Section-III of AIR Specification.

2.2 All accessories associated with Feeder cable are to be provided as per details given below:

- 2.2.1 3 -1/8" EIA flange connectors -2 nos. for each site
- 2.2.2 3 -1/8" EIA flange Gas Pass connector -2 nos for each site
- 2.2.3 3 -1/8" EIA flange Gas Barrier connector -2 nos for each site
- 2.2.4 Hoisting stockings -2 nos. for each site
- 2.2.5 Earthing kits - 3 nos for each site
- 2.2.6 Wall gland - 1 no - for each site
- 2.2.7 Cable clamps with nut, bolt washer (adjustable height) and associated Accessories
- 2.2.8 Any other accessories offered for the completeness of the system (Items wise details of offered and included material , items & part are to be given by the Tenderer) - 1 Lot for each site

2.3 GUARANTEE: Tenderer shall submit with his tender an undertaking to accept the following guarantees:

- (i) A guarantee that the equipment/item supplied will be in accordance with these specifications, varied only to the extent stated in his tender and agreed to in the contract.
- (ii) A guarantee to make good within 30 days at his own expense any component which becomes defective under normal operating conditions within 18 months from the date of acceptance of the equipment at respective site.

- (iii) A guarantee to supply all components for a period of 10 years from the date of acceptance of equipment at site, at rates at which these are being supplied by him to other customers & also should match prices of original manufactures of these components prevailing at the time.
- (iv) If at any stage, during next 10 years, the manufacturer stops production of this model of equipment, he shall intimate All India Radio in advance to enable the later to stock the critical items

2.4 Dehydrator with tubing & accessories :-- for ensuring required Pressurisation in entire RF Coaxial Cable and Antenna System - Chain for supplying dry air for Pressurisation -- for **One** RF feeder cable and Antenna system (**1 set for each site**).

Qty -Total 1Set for each site.

2.5 Technical specifications of the Dehydrator

SNo.	Technical Parameter	TECHNICAL SPECIFICATION
(i)	Dehydrator Type:	Automatic
(ii)	Operating Voltage:	Single Phase, 230 V(rms) ± 10%, 50 Hz ± 4%
(iii)	Output Capacity (SCFM)	> 0.3
(iv)	Ambient Humidity % maximum:	95%
(v)	Dry air storage tank capacity	Details to be given by the tenderer
(vi)	Output pressure (adjustable)	(Details to be given by the tenderer)
(vii)	Low pressure alarm(adjustable)	Details to be given by the tenderer
(viii)	Pumping Power Consumption :	Details to be given by the tenderer
(ix)	Compressor Rating:	Details to be given by the tenderer
(x)	Low Pressure Alarm:	Details to be given by the tenderer
(xi)	Dimensions, H x W x D, mm :	Details to be given by the tenderer
(xii)	Net Weight (kg):	Details to be given by the tenderer

2.6 GUARANTEE: Tenderer shall submit with his tender an undertaking to accept the following guarantees:

- (i) A guarantee that the equipment supplied will be in accordance with these specifications, varied only to the extent stated in his tender and agreed to in the contract.
- (ii) A guarantee to make good within 30 days at his own expense any component which becomes defective under normal operating conditions within 18 months from the date of acceptance of the equipment at respective site.

- (iii) A guarantee to supply all components for a period of 10 years from the date of acceptance of equipment at site, at rates at which these are being supplied by him to other customers & also should match prices of original manufactures of these components prevailing at the time.
- (iv) If at any stage, during next 10 years, the manufacturer stops production of this model of equipment , he shall intimate All India Radio in advance to enable the later to stock the critical items

SECTION-III

**SCHEDULE OF REQUIREMENTS / MATERIALS (UNPRICED)
[FOR ONE SET OF RF CABLE & DEHYDRATOR]**

Sr No.	Description	Quantity		Rate	Unit	Amount
		Bageshwar site	Ujjain site			
3.1	RF Coaxial air dielectric cable of size 3" or 3-1/8" (Nominal) fully pressurized as per details given below as per AIR Specification No: RF cable & Dehydrator/November/2008/-D(TD/FM)	120M	120M		M	
(i)	3-1/8" EIA flange connectors with gas pass connector.	2 nos	2 nos		each	
(ii)	3-1/8" EIA flange connectors with gas barrier connector.	2 nos	2 nos		each	
(iii)	Hoisting stockings.	2 nos.	2 nos.		each	
(iv)	Earthing kits (3nos).	1 Set	1 Set		set	
(v)	Wall gland.	1 no.	1 no.		each	
(vi)	Cable clamps with nut, bolt washer (adjustable height) and associated accessories.	1 lot	1 lot		lot	
3.2	Any other accessories offered for the completeness of the system (Items wise details of offered and included material , items & part number are to be given by the tenderer)	1 lot	1 lot		lot	
3.3	Dehydrator with tubing and accessories : As per AIR specifications	1Set	1Set		set	
3.4	Instruction manual for Installation, commissioning, Operation & Maintenance) along with manufacture's test Certificates as per Standard International manufacture's practice duly bound- set along with one soft copy on CD (after acceptance of tender) one for DE (Proj.) P&D Unit, DG:AIR and one set for each consignee as per specification.	2 Nos.	2 Nos.		Number	

Total

Signature of OEM/ tenderer with date and seal
Full Name in CAPITAL LETTERS