

ANNEXURE-A

SPECIFICATIONS & FEATURES OF BODY LEVEL HEARING AID ANALYZER/ TEST SYSTEM

TECHNICAL SPECIFICATIONS

PURPOSE: The purpose of this equipment is to test the body level hearing aids according to IS: 10775-1984 standard.

S.No.	Description	Remarks
1.	The equipment shall be able to perform all tests as defined in IS: 10775-1984 standard "Specifications for body level hearing aids" or latest	
2.	The following minimum characteristic test according to IS: 10775-1984 standard must be performed by the equipment	
2.1.	Maximum saturation sound pressure level	
2.2.	Average OSPL 90	
2.3.	Full-on acoustic gain	
2.4.	HF- average full-on gain	
2.5.	a) Basic frequency response b) Comprehensive frequency range	
2.6.	Frequency range	
2.7.	Effect of gain control positions on frequency response	
2.8.	Effect of tone control positions on frequency response (if applicable)	
2.9.	Effect of full-on acoustic gain of variation of battery voltage	
2.10.	Total harmonic distortion	
2.11.	Intermodulation distortion/difference frequency distortion	
2.12.	Effect of variation of battery voltage on distortion	
2.13.	Internal noise from the hearing aid in terms of equivalent input noise level	
2.14.	Battery current	
2.15.	Induction coil sensitivity (if applicable)	
2.16.	AGC characteristics (if applicable) a) Steady state input/output characteristics b) Dynamic output characteristics	
3.	The equipment shall be able to perform test sequence as defined in IS: 10775-1984	
4.	POWER	
4.1.	Source Voltage : 100-240 Volt AC	
4.2.	Frequency Range: 50-60 Hz	
4.3.	Suitable voltage stabilizer to be provided by bidder	
5.	The equipment shall be provided with suitable printer.	
6.	Proper closing of Test Area shall be ensured	
7.	ENVIRONMENTAL CONDITIONS: Suitable AC room/enclosure will be provided by ALIMCO.	
7.1.	Operating Relative Humidity range approx.: 5 to 90% relative humidity (non-condensing) or more	
7.2.	Operating Temperature range approx.: 15 to 35°C or more	
	The equipment shall have RS 232 or any other suitable interface. The whole responsibility of connection with existing system at ALIMCO lies with bidder	

8.	Suitable UPS with min 1 hrs. backup shall be provided by the bidder.	
9.	The equipment shall be provided with user interface.	
10.	All accessories required for proper functioning of machine and to meet IS standard is in the scope of bidder. Also, bidder to provide a list of all accessories.	
11.	Software: Proprietary software for proper functioning of machine shall be provided.	
12.	Manual	
	i. Operator's Manual: 02Nos. shall be provided	
	ii. Maintenance Manual: 02Nos. shall be provided	
13.	Spares for 2 years maintenance period is in scope of bidder.	
14.	Training: For operation, testing, Calibration & maintenance of Hearing Aid Analyzer. 30 man days	

DELIVERY PERIOD INCLUDING INSTALLATION & COMMISSIONING:

The delivery period including installation & commissioning of body level hearing aid analyzer/test system at the destination mentioned in Para 1 on page no. 02 of the tender documents will be 01 month from the date of placement of Purchase Order/work contract.

WARRANTY:

The entire machine inclusive of all system/accessories should be covered under comprehensive warranty for a period of 24 months (min.) from the date of successful commissioning

NOTE-

1. Bidder shall be responsible for complete supply, installation and commissioning of the machine/item/equipment/system including transportation, unloading and loading, placement, taxes, any other cost etc.
2. The machine/item/equipment/system shall be proved out at site by demonstrating the parameters mentioned in technical specifications.

**SPECIFICATIONS&FEATURES OF BEHIND THE EAR
HEARINGAIDANALYZER/TESTSYSTEM**

TECHNICAL SPECIFICATIONS

PURPOSE: The purpose of this equipment is to test the behind the year hearing aids according to IS: 16127: 2013 standard.

S.No.	Description	Remarks
1.	The equipment shall be able to perform all tests as defined in IS: 16127: 2013 standard "Behind the ear (BTE) Hearing Aids-digital - specifications" or latest	
2.	The following minimum characteristic test according to IS: 16127: 2013 standard must be performed by the equipment	
2.1.	Maximum OSPL 90	
2.2.	HF average OSPL 90	
2.3.	HF average full on gain (at 50/60 dB input)	
2.4.	Frequency range	
2.5.	Effect of tone control positions on frequency response	
2.6.	Total harmonic distortion	
2.7.	Internal noise from the hearing aid in terms of equivalent input noise level	
2.8.	Induction coil sensitivity (if applicable)	
2.9.	AGC characteristics (if applicable) a) Steady state input/output characteristics b) Dynamic output characteristics	
3.	The equipment shall be able to perform test sequence as defined in IS: 16127: 2013	
4.	POWER	
4.1.	Source Voltage: 100-240 Volt AC	
4.2.	Frequency Range: 50-60 Hz	
4.3.	Suitable voltage stabilizer to be provided by bidder	
5.	The equipment shall be provided with suitable printer.	
6.	Proper closing of Test Area shall be ensured	
7.	ENVIRONMENTAL CONDITIONS: Suitable AC room/enclosure will be provided by ALIMCO.	
7.1.	Operating Relative Humidity range approx.: 5 to 90% relative humidity (non-condensing) or more	
7.2.	Operating Temperature range approx.: 15 to 35°C or more	
	The equipment shall have RS 232 or any other suitable interface. The whole responsibility of connection with existing system at ALIMCO lies with bidder	
8.	Suitable UPS with min 1 hrs. backup shall be provided by the bidder.	
9.	The equipment shall be provided with user interface.	
10.	All accessories required for proper functioning of machine and to meet IS standard is in the scope of bidder. Also, bidder to provide a list of all accessories.	
11.	Software: Proprietary software for proper functioning of machine shall be provided.	
12.	Manual	
	iii. Operator's Manual: 02 Nos. shall be provided	
	iv. Maintenance Manual: 02 Nos. shall be provided	

13.	Spares for 2 years maintenance period is in scope of bidder.	
14.	Training: For operation, testing, Calibration & maintenance of Hearing Aid Analyzer. Approx. 30 man days	

DELIVERY PERIOD INCLUDING INSTALLATION & COMMISSIONING:

The delivery period including installation & commissioning of behind the ear hearing aid analyzer / test system at the destination mentioned in Para 1 on page no. 02 of the tender documents will be 01 month from the date of placement of Purchase Order/work contract.

WARRANTY:

The entire machine inclusive of all system/accessories should be covered under comprehensive warranty for a period of 24 months (min.) from the date of successful commissioning

NOTE-

1. Bidder shall be responsible for complete supply, installation and commissioning of the machine/item/equipment/system including transportation, unloading and loading, placement, taxes, any other cost etc.
2. The machine/item/equipment/system shall be proved out at site by demonstrating the parameters mentioned in technical specifications.