

Ref: CL/PP/BID-02(07-08)

Date: 10-04-2007

Subject: SUPPLY OF FREQUENCY CONVERTER (DIGITAL) FOR CL.

Dear Sirs,

Technical & Commercial Bids are invited for the supply of **FREQUENCY CONVERTER (DIGITAL)**, in **separate SEALED** covers, which should reach the undersigned latest by 1700 h, on **01 May 2007**, at the following address.

Director & Head (Planning & Purchase)
BUREAU OF INDIAN STANDARDS
Central Laboratory
Plot No.20/9, Site-IV,
Sahibabad Industrial Area, Sahibabad,
Distt. Ghaziabad-201010 (U.P.)

- 2.The detailed specification of the above mentioned equipment(s)/item(s) are given in **Annex- I**
3. Terms and conditions of supply are given in **Annex-II**
4. The technical Bids shall be opened in the **Conference Hall**, of the Central Lab, at the address mentioned above at **1500 h on 03 May 2007** and in the presence of such tenderers or their duly authorized representatives, who may like to attend.
5. Please note that the envelopes containing Technical & Commercial Bids are sealed properly i.e. either wax sealed or with adhesive cello tape on both ends. **Unsigned & Unstamped Bids in Unsealed /stapled envelopes** and bids **without EMD** shall be summarily rejected. **No exemption** whatsoever for payment of EMD shall be accorded.
6. The specification and terms & conditions can also be downloaded from BIS Website – www.bis.org.in

Thanking you,

Yours faithfully,

Encl.: as above

-Sd/-

Director & Head (Planning & Purchase)

**BUREAU OF INDIAN STANDARDS
CENTRAL LABRATORY
EQUIPMENT SPECIFICATION**

EQUIPMENT /SPECIFICATION CODE:	CCE 01
NAME OF THE EQUIPMENT	: FREQUENCY CONVERTER (DIGITAL)
PROPOSED FOR BIS LABS	: CL ELECTRICAL
TOTAL QUANTITY REQUIRED	: One

Purpose: To supply regulated voltage and frequency for testing of Ventilating Fans and FHP Motors.

Type: Static Frequency Converter

Reference: IS: 2312-1967, IS: 996-1996 and IS: 11951-1987

Features:

- i) Frequency Converter shall consist of solid state electronic components.
- ii) INPUT :
Voltage range 160 to 260 V, Single phase, 3 wire, AC.
Frequency range of 47 - 53 Hz
- iii) OUTPUT:

Power: 1 KVA, Single Phase with Sinusoidal Waveform

Voltage: It shall be adjustable any where between 220 V and 250 V, ac and with fineness of adjustment within 1 V

Voltage Regulation: $\pm 1\%$

Frequency: 50.0 Hz

Load Power Factor: The Equipment shall be capable of functioning at Load Power Factor from 0.5 lagging to unity Power Factor [Preferable: 0.5 lagging to 0.5 leading]
- iv) Total harmonic distortion shall be as minimum as possible but not more than 3 %.
- v) The Output frequency shall not vary with output voltage or Load variations. The equipment shall have the provision to adjust the output frequency to a fixed value of 50.0 Hz, in case of any variation is observed.
- vi) The equipment shall be provided with adequate protective devices on Input as well as output circuits, against Short Circuit & Overload. In case of metallic casing, proper earth connection shall be provided.

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- vii)** Proper indications shall be provided for Mains-ON, Output-ON and Overload.
- viii)** Accuracy of measuring instruments shall be class 0.5 or better.
- ix)** Digital display shall be provided for the following test parameters:
 - a)** Output voltage (V), with a Least Count of 1 V;
 - b)** Output frequency (Hz), with a Least Count of 0.01 Hz
 - c)** Output current (A), with a Least Count of 0.01 A
- x)** Provision shall be made to enable removal of the instruments for calibration/ repair.
- xi)** All measuring devices shall be supplied with calibration certificates from NABL accredited lab.

TERMS & CONDITIONS

1. The BUREAU gives FIRST PREFERENCE in its purchase to goods bearing ISI CERTIFICATION MARK and second preference to those which conform to the relevant Indian Standard Specifications.
2. The delivery of the stores is required to be made within 30 days of receipt of order. If, it is not possible for you to effect delivery within the period, you are required to specify the date by which you can guarantee delivery of the stores.
3. The **Technical & Commercial Bids should be sealed and sent separately in sealed envelopes & duly superscribed (giving Equipment name, technical/financial bid, due date of opening & Ref. No. on the top of the envelope)**. Such Bids shall remain valid for a period of 90 days from the date of opening.
4. Quotations/Bids, qualified by indefinite expressions as "Subject to immediate acceptance, Subject to prior sale" etc. and incomplete quotations are liable to be summarily rejected.
5. The Bids should clearly give break-up of cost of each equipment. The rates quoted should separately indicate Basic Cost, Excise Duty, Sales Tax, P&F charges, Freight, Insurance, VAT etc. Rates quoted should specifically state Sales Tax, Excise Duty or any other taxes/charges. In absence of any such stipulation, it will be presumed that the prices include all such charges and no claim for the same shall be entertained. **Form C/D shall not be provided by BIS.**
6. Each tender document shall be accompanied with **EMD of 3% of cost of the equipment**. The demand draft for the EMD amount shall be drawn in favour of BUREAU OF INDIAN STANDARDS payable at Sahibabad/Ghaziabad. The sealed envelope containing EMD should be super scribed "**EMD**" and **stapled separately with the envelope containing the commercial Bids. No disclosure of EMD in Tech. Bid.**
7. BIS shall pay **90%** of the cost after satisfactory installation & commissioning and the Balance of **10% as contract performance security** would be paid after expiry of warranty period. However other terms of payment for contract performance security can also be considered, if so stated clearly.
8. The **warranty period** of the equipments **may be stated clearly** in the Technical Bids. In case the **same is not found stated**, it will be presumed that **warranty period as mentioned in their respective specifications of the tender document (if specified), is applicable**
9. Please mention clearly in the Technical Bids regarding address of **arrangements for service/repair** of the equipments are available. Suppliers having such arrangements near Delhi/Ghaziabad would be preferred.
10. All goods received would be subjected to inspection, by BIS before or after receipt or commissioning (as applicable) and the decision of BIS shall be binding. Rejected items/goods/stores shall be removed by the supplier at his own cost and risk, within 30 days of receipt of notice for the removal of such goods, and no liability, whatsoever, on the Bureau shall be attached for the rejected/disapproved goods/items/stores.
11. The Bureau reserves the right to accept or reject summarily and or all tenders in whole or part without assigning any reason whatsoever.
12. The Bureau takes no responsibility for delay, loss or non-receipt of tenders after dispatch.
13. **In case of non compliance with the Terms & Conditions of the contract, the Bureau reserves its right to:**
 - a) Cancel/rescind/revoke the order if supply is not made in time and is not conforming to the required specification.
 - b) Impose Penalty up to 1% of the total value of the order for a delay of every seven days after the schedule date subject to the ceiling of a maximum of 10% of the total value of the order.
14. All questions, disputes or difference arriving under, out of or in connection with this tender enquiry shall be subject to the exclusive jurisdiction of Delhi/ Ghaziabad Courts.