



Government of India
Bhabha Atomic Research Centre
Accelerator Control Division
Electromagnetic Applications Section



Ref : ACnD/EMAS/JI/2018/520

Date :09/07/2018

Sub: Fabrication, supply and testing of high precision chassis mountable dual output linear power supplies as per TSP/08

Dear Sir/Madam,

1. Quotations are invited for the *execution of subject work*.
2. Taxes and Excise Duties shall be quoted separately. Form AF / H whichever is applicable shall be provided, if required.
3. The suppliers are shall submit the cost for Design, fabrication, assembly and testing. All necessary tools, instruments have to be arranged by the supplier.
4. The quotation must reach the undersigned on or before **19th July, 2018** and must be sent in a sealed envelope super-scribed with the **reference number & the due date** given above.
5. The quotations must reach us on or before the aforesaid date by India post (by speed post or ordinary post) only.
6. The address on the envelop should read:

**The Head,
Electromagnetic Applications Section,
Accelerator Control Division,
RCnD Bldg., North Site,
B.A.R.C, Trombay,
Mumbai - 400 085.
(Attn: Shri. Janvin Itteera)**

7. The Purchaser representative shall approve the design of the P.C.B, consequent to which the supplier shall commence the fabrication of the jigs and fixtures.
8. The testing of the amplifier shall be conducted in the presence of the Purchaser representatives only, further details are laid down in the enclosed specification sheet.
9. The bidder is expected to deliver the finished components after the approval by our engineer within 02 months from the date of receipt of firm work order.
10. All the raw materials used shall have the manufacturer's QC/QA certificates for ensuring the authenticity of the components. Further details are mentioned in the enclosed specification sheet.
11. The finished components with the test certificates as mentioned in the enclosures shall be delivered by the manufacturer after the award of the contract at Accelerator Control Division(ACnD), BARC, Trombay, Mumbai - 400 085.
12. Head, Electromagnetic Applications Section, ACnD reserves the right to accept / reject any or all quotations without assigning any reason.
13. Delivery, packing & forwarding charges, if any, must be clearly mentioned in the offer.
14. Drawings / Sketches (if any) must be returned along with the offer
15. Quotation must indicate the VAT no / PAN no of the vendor & validity of offer. Minimum validity of 60 days is preferred.
16. The quotation has to be duly signed by *authorized person with company seal*. *Unsigned offers shall be treated as invalid*.

Encl.: TSP/08 (Rev.0)

(SD/-)
**Head, Electromagnetic Applications Section
B.A.R.C**
For & on Behalf of the President of India
(The Purchaser)

1.0) Statement of Purpose :

The Purchaser is involved in the fabrication of linear power supply which is chassis mountable and dual output

2.0) Scope of the job

2.1) Supplier shall design, fabricate and assemble electronic linear power supplies and test the same for low ripple.

2.2) The supplier shall also mount a temperature sensor for precision temperature control

A suitable Faraday's Enclosure required for isolating the potential noise generated out of the magnetic core of transformers if used.

4.0) Execution of the Job:

The supplier has to execute the work in the following phases.

a) Phase-1: The Supplier shall submit the design layout of the enclosure for approval.

b) Phase-II: Consequent to the approval of functional trials, the supplier shall manufacture the final PCB.

c) Phase-III: The supplier shall assemble the components while ensuring solder temperature of none of the component are exceeded.

d) Phase-IV: The functional testing of the linear power for continuous operation. Consequently, Supplier shall enclose the circuit in an approved metallic enclosure.

5.0) Technical Parameters

In addition to the details highlighted on the drawing enclosed please find under the basic parameters.

S No.	Parameters	Specification
1	Input voltage	230Vac, 50Hz
2	Output voltage	+12V,0V, -12V(dual output)
3	Output current per channel	1.6A
4	Mounting style	Chassis mountable
5	Category	Linear power supplies
6	Output voltage regulation	< 0.07%
7	Over-voltage protection(I/P)	Required
8	Temperature stability	< 0.5%/°C
9	Cooling	Air(natural)
10	Compliance	With Input filters preferred
11	Operating temperature range	10 to 50°C

6.0 Functional acceptance Testing:

6.1) Output voltage Amplitude regulation : With input voltage and a resistive load of 10Ω, 50W, across both the output supplier shall continuously monitor the output voltage ripple with a oscilloscope 20MHz(battery operated) at purchaser site.

6.1.1) The amplitude variation has to be within 0.07% .

6.1.2) Temperature rise to be within operating limits

7.0 Deliverables

S No.	Description	Qty
01	Chassis mountable linear power supplies	05 Nos

8) General Instructions

i) Suppliers shall enclose the complete all documents specified in para 7.0 section – I. Tenderer may be kindly aware that non-receipt of the technical details as demanded herein would tantamount to disqualification.

ii) Overall cost will be compared and should include packaging, forwarding and safe delivery to Purchaser site.

iii) Supplier shall give complete details of their product & list of users for technical evaluation